

MANUFACTURING IN THE USA: WHY WE NEED A NATIONAL MANUFACTURING STRATEGY

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

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WEDNESDAY, JUNE 22, 2011

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to call, at 10:16 a.m. in Room 216 of the Hart Senate Office Building, the Honorable Robert P. Casey, Jr., Chairman, presiding.

Senators present: Casey, Klobuchar, and Lee.

Representatives present: Brady, Duffy, and Mulvaney.

Staff present: Gail Cohen, Will Hansen, Colleen Healy, Jesse Hervitz, Christina Forsberg, Jane McCullough, and Robert O'Quinn.

OPENING STATEMENT OF HON. ROBERT P. CASEY, JR., CHAIRMAN, A U.S. SENATOR FROM PENNSYLVANIA

Chairman Casey. The Committee will come to order.

This morning we are going to go in an order which we normally do not. We will have statements after our first two witnesses. We are really honored today to have Senator Stabenow and Congressman Bass. We will start with Senator Stabenow, and I will do an introduction of both of our first witnesses.

Senator Stabenow is the Chair of the Senate Agriculture and Nutrition and Forestry Committee. She is also a member of the Senate Energy Committee, the Finance Committee, and the Budget Committee. She serves as the Co-Chair of the Bipartisan Senate Manufacturing Caucus, and was appointed to the President's Export Council by both President Bush and President Obama. She has sponsored many initiatives to revitalize our manufacturing sector, including the Retooling Loan Program for Advanced Manufacturers that is bringing jobs back to the United States. Also I want to make sure that I mention she represents the State of Michigan, and I know she is very proud of that. And I know as a new Senator, she was here a number of years ahead of me, she was a mentor to new Senators and continues to serve in that capacity.

Senator, we are grateful you are here with us this morning.

I would also like to welcome Representative Charles Bass from New Hampshire's Second Congressional District. Representative Bass has promoted clean alternative energy, and serves on the House Energy and Commerce Committee. Prior to being elected to Congress in 2010, Representative Bass served on the Board of Managers at New England Wood Pellet in Jaffrey, one of the leading producers of clean-burning wood pellets.

Representative Bass previously held the same seat in Congress from 1995 until 2007.

So we will start with Senator Stabenow. We are grateful that the Senator and the Congressman are with us today.

**STATEMENT OF HON. DEBBIE STABENOW, A U.S. SENATOR
FROM MICHIGAN**

Senator Stabenow. Well thank you so much, Chairman Casey, and Vice Chairman Brady. It is really wonderful to be here with you. And I want to thank you for recognizing the importance of manufacturing in this country, and having this hearing.

I think this is a very, very important hearing and I very much appreciate our friendship and working relationship, and how you fight for Pennsylvania; but I very much appreciate, as Chair and Vice Chair, that you are both focused on manufacturing in this country. So thank you.

We of course understand in Michigan. This is a critical issue for us, as it is for your state. In order to have a middle class in this country, I firmly believe that we need to make things and grow things. And if we make things here and we grow things here, the jobs are here. That is pretty fundamental philosophy that I operate under, and I think is one that makes sense for us.

We are very proud in Michigan in the last century to be the heart of American manufacturing, and are rightfully proud of our role in creating the middle class of this country. But for too long, we have seen a situation where our companies are actually competing against countries. That is really what is happening.

It first started with Japan and their huge investments in advanced battery manufacturing, that then allowed their automobile companies to be able to move more quickly in terms of hybrids and electric vehicles, because they were funding that and investing in that—their government was doing that. But we are now seeing China, and we all know there are a thousand different challenges around China and India have a manufacturing strategy. Germany, a very different economy, has a manufacturing strategy. They are aiming to compete with us because they want what we have had: a robust middle class and a strong economy for the majority of their citizens.

In the years between 1979 and 2009, the United States unfortunately lost more than 8 million manufacturing jobs. And Michigan alone has lost more than 300,000 manufacturing jobs just in the last 10 years.

During that time, countries like China have been investing heavily in emerging technologies, and frankly if they don't create it, they'll just steal it from us. They don't seem to understand patent law, and we have a number of different challenges with China.

But they have certainly been focusing on renewable energy. And we all have been watching that happen. In the next two years alone, China will invest almost \$15 billion in advanced battery technology to compete with us.

Japan paid, as I said, for almost all of the initial research for Toyota to create the batteries for their vehicles. And last year, China again invested over \$20 billion in their solar industries—in their solar industry. Unfortunately, part of China's manufacturing

strategy, as I indicated, is stealing intellectual property and putting up barriers to American manufacturers, which is a part of what we need to address in terms of fair trade, the ability to have doors open, and to be able to have the rules apply on both sides of the door. So breaking down international trade barriers is very important for us.

We need to hold China accountable and devote additional resources to trade enforcement, and there are a number of bills that Senator Graham and I have introduced, and others have joined us, to be able to address that.

But we also have to make strategic investments in clean energy technologies. President Obama has challenged us to put 1 million electric cars on the road by 2015. We all realize that by investing in electric vehicle innovation we can create jobs in America, and frankly get us off of foreign oil and address a number of other issues, including national security.

So I would urge that we look at what we have done in the last two years; we invested \$2 billion in the Recovery Act in advanced battery innovation and manufacturing. That unleashed tens of billions of dollars in private investment.

While other countries around the world are investing much, much more, we found that public/private partnerships create new jobs and new industries. In fact, by 2015 we will have gone from 2 percent of the world's advanced battery manufacturing to the capacity to produce 40 percent of the world's batteries because of the public investment unleashed to work with the private sector.

Since January 2010, we've created nearly a quarter of a million manufacturing jobs. And that is the first increase in a decade. Why? Because we've begun to do a few things. And I see, as my time is coming to a close, I will just briefly say that we have done a number of things focusing on clean energy, both advanced clean energy loans that we have done in order to make sure capital is available—you mentioned the retooling loans, Mr. Chairman, that we did in the Energy Bill in 2007 that has actually allowed a number of companies to expand. I will mention one great company in Michigan, Ford Motor Company, that retooled a large truck plant to bring back the small vehicles, the Ford Focus Electric and other Ford Focus options. They are bringing jobs back from Mexico related to that production because we partnered with them to retool plants.

So whether it is battery innovation, retooling plants, the advanced manufacturing tax credit which we dubbed as 48(c), we are in a situation now where we are beginning to see some changes because we are investing.

The only manufacturing tax credit we have on the books right now is the 30 percent credit for clean energy manufacturing for equipment and buildings that we passed two years ago called 48(c). And I would strongly conclude by saying we should strongly invest in those things that have begun to work. The Advanced Manufacturing Tax Credit now has enabled companies in 43 states to be able to open and expand in new kinds of technologies.

And let me just say one final thing. That is, while China has 5- or 10-year plans, our policies are too unpredictable. We do things

a year at a time, if we are lucky. Other countries are looking at 5 years, 10 years, or longer.

For our private sector to have the confidence to invest—and these are major investments—to create jobs, we need longer-term policies. Innovation, fair trade, longer-term policies, and I truly, truly believe that if we make the right investments, partnering together in a global economy where every single company is competing against countries right now, we will reinvigorate and create an advanced manufacturing economy that is critical for us as we move forward and have a strong middle class in this country.

Thank you very much.

[The prepared statement of Senator Debbie Stabenow appears in the Submissions for the Record on page 38.]

Chairman Casey. Senator Stabenow, thank you very much. I should have mentioned at the beginning of your testimony that your statement, your full statement, will be made part of the record. And that obviously would apply to the Congressman, as well. Congressman Bass.

**STATEMENT OF HON. CHARLES F. BASS, A U.S.
REPRESENTATIVE FROM NEW HAMPSHIRE**

Representative Bass. Thank you very much, Mr. Chairman, and I would like to have my statement made a part of the record. I appreciate the opportunity to testify before the Committee today.

My home State of New Hampshire I believe is an excellent example of a state with a diverse economy and a diverse manufacturing sector. We have low unemployment, less than 5 percent, 4.7 percent the last statistics. We have a highly educated, highly skilled work force, and a lower tax rate than 49 other states in America.

We have small government, and we have an economy I think that benefits from those factors. I hope that my perspective, both as a manufacturer and as a Representative of the State of New Hampshire, will be useful in this discussion.

We have large employers. BAE Systems, employing more than 5,000 people in the defense industry. In fact, 11 percent of the total output of our economy is directly associated with manufacturing. But it has not always been that way or, put it this way, the output has not been the same.

My ancestors settled in the State of New Hampshire in the mid-1700s. They were farmers, and they grew flax. And it was a miserable existence. Their children built the Phoenix Mill in Peterborough, New Hampshire, which was a manufacturer of—it was a textile manufacturer. They took the sheep, and so forth, and started making clothing.

Throughout the next 200 years, the economy evolved in the State as a manufacturing economy in textiles, in shoes. In the 1950s, New Hampshire was one of the leading defense contractors in the country. In the early to late 1990s, New Hampshire was number two in the Nation for high-tech employees. And now where are we today?

Well, as Senator Stabenow so articulately discussed, we are hoping to be able to lead the way in the development of technologies in the area of alternative energy. And it is one of my passions in my, shall we say my new life here in the U.S. Congress.

All in all, we survived because we have an environment where we create the ability for manufacturers to thrive in an environment that supports entrepreneurship. It believes that capitalism is not a dirty word. Where the need for a safe workplace, for good environmental controls, for good access to products—and make sure they are what they are supposed to be—where that is balanced with the need not to tie down our business community to the extent that they are spending unnecessary sums of money in labor trying to meet regulations that are not necessarily in the best interests of anybody.

I ran for Congress in 1994 because—or the tipping point was in my company. I went to the Xerox machine one day—this was in 1994—and there was this enormous placard over the machine that the Xerox maintenance guy had put up there, and it explained chapter, after chapter, after chapter about how I needed to do this or that in order to copy paper because the toner that was in there might harm me forever. And I had been using this machine for 10 years. I felt fine.

And I could not believe—I asked the Xerox guy, and he said: Oh, we have to put that up there now. It's part of the rules, and you have to read it, and we are going to have to tell you about it.

I said, something is wrong here. Something is wrong. And we owned a manufacturing facility that was in full compliance with OSHA, then MOSHA appeared. Now it's in a state that starts with "M." MOSHA's regulations were different from OSHA's regulations. So we didn't know which set of regulations in our factory we were supposed to follow. Because if we followed MOSHA, we might be in noncompliance with OSHA, and vice versa.

It was very perplexing. This is not good for manufacturing in America. Now I am as much in favor as anybody of a safe workplace, but we have to apply a level of cost/benefit to all the inter-relationship between government and manufacturers.

Like many of us here, I watch occasionally shows on TV. There's one I recall called "How It's Made." And if you can get by the obnoxious music, it is really quite extraordinary, the level of sophistication that we have in manufacturing, and every one of those little shows is about American manufacturing and how diverse we can be.

If we can keep our tax rates competitive globally, if we can balance regulations so that the consumers and public and working Americans are safe, yet we can compete with other manufacturers around the world, we will stay ahead of China. We are well educated. We are like 10 to 1 more productive on a per-capita basis than Chinese workers. But we need to have a good, competitive workplace. We need to be able to trade, and we need to be able to continue to have a well-educated workforce. We do not need the government to tell us how to succeed in manufacturing. I have done it, and I did it without any help from the U.S. Government.

Thank you very much.

[The prepared statement of Representative Charles F. Bass appears in the Submissions for the Record on page 39.]

Chairman Casey. Congressman, thank you very much.

As is often the case when Members of the House and the Senate testify, we usually do not have a lot of questions because I know

you are busy, unless Congressman Brady, our Vice Chair, has questions? I just wanted to thank you for your testimony. If we have any—and I will speak for myself—I will submit them. But I know you might have places you need to get to.

Vice Chairman Brady.

Vice Chairman Brady. No, I agree with you. I just want to thank you for holding this hearing, and to thank you for this testimony. It is real-life testimony, and we need to hear it as we look at how do we revive this economy and how do we keep a very strong, important part of our sector, manufacturing, moving forward.

So I want to thank Senator Stabenow and Congressman Bass for being here today and leading off this hearing.

Representative Bass. Thank you.

Senator Stabenow. Thank you very much.

Chairman Casey. Thank you, both.

As we are moving to our second panel, I will begin my opening statement so we can keep things moving in the right direction.

First of all I want to thank everyone for being here to discuss a critically important issue—manufacturing in the United States of America. The subtitle for our hearing is: Why we need a national manufacturing strategy.

I am pleased to hold this hearing today, along with Vice Chairman Brady, to discuss the critical role that manufacturing plays in the United States economy and the actions Congress can take to strengthen and revitalize the manufacturing sector.

For decades, manufacturing has been a pathway to the middle class for millions and millions of American families. We made world class products over many years, whether it was steel, cars, clothes, or furniture. And the people who made these products were paid good wages with solid benefits at the same time.

But in the past three decades, more and more of these jobs have moved overseas to developing countries with abundant supplies of cheap labor. The unfortunate reality is that our trade policies have failed to protect our workers from unfair trade practices such as currency manipulation, loose enforcement of intellectual property rights, and lax environmental protection in other countries.

When we lose these jobs overseas, of course, we lose jobs which we need. We also jeopardize U.S. leadership in research and development, as well as innovation which created the opportunities in the first place.

The numbers tell a worrisome story. Manufacturing employment peaked in the United States in 1979 at 19.6 million workers. Today we are down to 11.7 million people employed in manufacturing. Again, that is 19.6 to 11.7—a decline of 40 percent just in those few short years.

The last 10 years have been extremely tough for U.S. manufacturing overall. From January of 2001 until May of 2011 the United States lost 5.4 million manufacturing jobs—just in those 10 years—including 285,000 in my home State of Pennsylvania.

Most of these losses occurred between February 2001 and February 2009 when 4.6 million U.S. manufacturing jobs disappeared in just that 8-year period.

In the past year-and-a-half, manufacturing as a sector has gained strength. That is a little bit of good news. It has also regained some of the jobs lost during the previous decade. Since the end of 2009, manufacturing has added 250,000 jobs approximately—important progress to be sure, but we need to do a lot more in the months and years ahead.

This hearing is about how we build on the recent progress and lay the groundwork for future growth in manufacturing. It is clear that we need to take actions that have both an immediate and a long-term benefit just over the horizon. The starting point should be a national manufacturing strategy, not just a set of policies here and there, but a real strategy.

While other countries, including Germany, India, China, and Japan, have marshalled their resources and laid out a strategy, the United States has stood silent. The U.S. needs to develop a comprehensive national manufacturing strategy built from the input of small and large businesses, labor, and other key stakeholders in this strategy.

It must be updated regularly, and it must ensure that we are responding to new challenges and seizing new opportunities. This will allow us to effectively coordinate our resources and maximize our effort.

But there are other steps we can take. As we have discussed at our Joint Economic Committee hearing on the Life Sciences Industry, we should make permanent the research and development tax credit to give companies the certainty that they need to make long-term R&D investments here in the U.S.

And it is time to crack down on China's currency manipulation and other unfair trade practices so that American companies and workers have a fair shot. The under-valuation of the yuan provides a significant subsidy, as much as 40 percent, to China's exports.

It is as if in a 100-yard dash you give your opponent, or your competitor, a 40-yard headstart. It would not be fair in that instance, and we should not let the Chinese get away with a 40 percent headstart in currency.

Currency manipulation is costing our workers jobs, and it needs to be stopped. We need to stop talking about it and do something about it. We must extend trade adjustment assistance to help workers who have lost their jobs based upon unfair foreign competition, and we need to find new strategies to increase employment.

In Pennsylvania alone, almost 24,000 people receive the help the TAA provides. TAA strengthens the safety-net protections for our workers, and it needs to be extended before we consider any trade agreements with South Korea, Colombia, and Panama. Earlier this week I introduced legislation to extend Trade Adjustment Assistance for five years, and we need it.

Finally, we must continue to invest in science, technology, engineering, and math—the STEM disciplines, each of which are very important to our education system, so that our young people are prepared for the high-skilled and high-paying jobs of the future.

These are a few of the concrete steps we can and should take. Even with all the losses, manufacturing is still the heart and soul of our economy. Even though our manufacturing employment has

declined significantly since the 1970s, the U.S. remains the world's manufacturing leader, producing one-fifth of manufactured products worldwide.

As a Nation we have not done enough to support and protect our excellent manufacturing companies and workers. It is time for that to change, and changing means charting a new manufacturing strategy which will strengthen our economy and help create new jobs and new opportunities.

I believe that hearings like today's can build a bipartisan consensus; we saw that today on our first panel consisting of a Democratic Senator and a Republican House Member. We can build that consensus on the core elements of a comprehensive strategy to support manufacturing and strengthen our middle class.

Today's hearing is the first in a series of hearings that the Joint Economic Committee will hold to determine the best strategies for revitalizing manufacturing and rebuilding that base.

We are fortunate today to have with us a distinguished panel of experts who bring with them a deep knowledge of manufacturing and a valuable perspective on the steps we can take to re-energize this vibrant sector of the American economy.

So we look forward to our panel's testimony today. We are grateful for their testimony. I will be introducing our panel members in a moment, but I wanted to hear, as well, from our Vice Chairman, Chairman Brady. We are grateful for the hearing he chaired yesterday on the House side, and we are especially grateful that he made the journey over to this side of the Capitol today, and we are grateful for his opening statement.

**OPENING STATEMENT OF HON. KEVIN BRADY, VICE
CHAIRMAN, A U.S. REPRESENTATIVE FROM TEXAS**

Vice Chairman Brady. My pleasure. Thank you, Chairman, again, for calling a hearing on this important topic. I appreciate this distinguished panel being here, as well.

The U.S. manufacturing sector has changed dramatically over the last several decades. Manufacturing productivity in America has soared. What took 1,000 workers to produce in 1950 now takes only 184.

Today U.S. manufacturers produce two-thirds of what our country consumes, down from 80 percent three decades ago. Many consumer goods, as we know, that were manufactured here are now imported. In the 1960s, U.S. manufacturers made 98 percent of America's shoes, but today it is the opposite: 90 percent of those shoes are brought in.

During the same time, entirely new manufacturing industries have arisen in America—such as in computer chips. Today, chemical products, food, computers, and electronics, fabricated metal products, and machinery are the top five manufactured products in America.

While technology and productivity has shrunk the American manufacturing workforce over the past 40 years, manufacturing remains an important part of our economy. U.S. manufacturers produce about 12.5 percent of our gross domestic product and employ about 9 percent of our workers. That translates into 12 million

manufacturing jobs and nearly 7 million related jobs, many of them in small businesses.

By transitioning to higher-value products, America leads the world in manufacturing output and is the world's largest manufacturing economy, producing 21 percent of global manufactured products. China is second at 15 percent, and Japan is third at 12. However, China is quickly becoming a contender for the top spot.

Manufactured goods account for more than half of what America sells to other countries. We rank third in the world as a manufacturing exporter, following the European Union and China.

Today, as America's economic recovery struggles, regional indicators suggest that manufacturing growth has recently stalled in many parts of our country.

In light of these dramatic changes, the issue at this hearing is whether Congress should adopt an industrial policy for manufacturing under the modest fabric of a national manufacturing strategy. It is a timely question.

My concern is that, while often well intentioned, an industrial policy can morph into a form of central planning which requires the replacement of the invisible hand of the free market with the visible hand of the government. Driven by understandable but too often misguided political considerations and buttressed with incomplete data and outdated perceptions, it can result in the undesirable: rent seeking, corporate cronyism, and economic stagnation.

In countries around the world, industrial policy has repeatedly failed. Instead of fostering new products and technologies, old firms in declining industries inevitably capture industry policy to protect themselves at the expense of the consumer and ultimately economic growth.

As President Reagan once observed of government's view of business: If it moves, tax it. If it keeps moving, regulate it. If it stops moving, subsidize it.

President Carter's Chairman of the Council of Economic Advisers, Charles Schultz, observed, quote:

"One does not have to be a cynic to forecast that the surest way to multiply unwarranted subsidies and protectionist measures is to legitimize their existence under the rubric of industrial policy. The likely outcome of an industrial policy that encompassed some elements of both 'protecting the losers' and 'picking the winners' is that the losers would back the subsidies for the winners in return for the latter's support on issues of protectionism." End quote.

As we listen to testimony today from our distinguished lawmakers, economists, and business leaders, my thought is that instead of a Washington-centric industrial manufacturing policy, Congress should instead adopt pro-growth economic policies that raise the competitiveness and opportunity for all economic boats in our country.

One, to ensure businesses do not bear higher tax costs, Congress should adopt a comprehensive plan to reduce federal spending relative to the size of our economy, reform our entitlement programs to make them sustainably solvent, and gradually bring the federal budget back into balance.

Two, to increase competitiveness around the globe, Congress should reform our corporate tax system. The United States has the

second-highest corporate income tax rate in the world. Congress should reduce the after-tax cost of new investment by expensing most equipment and shortening the depreciation schedules for buildings. Congress should move to a territorial tax system. Until then, Congress should act now to allow U.S. corporations to repatriate stranded American profits to invest in new jobs, research, investment, and financial stability here at home.

Three, to find new customers for American manufacturers, farmers and service companies, Congress should immediately approve the three outstanding free trade agreements with Colombia, Panama, and South Korea and seek more opportunities to open growing markets to American workers.

And fourth, to reduce unit costs and keep American companies located in America, Congress should repeal laws that drive up costs—such as the new national health care law and unnecessary federal regulations. To help erase the estimated 18 percent cost disadvantage for U.S. manufacturers compared to their global competitors, Congress should act now to modernize our patent system and to reform our tort system to reduce those excessive costs in frivolous lawsuits.

I believe adopting these economic policy changes would benefit U.S. manufacturers, their customers, their suppliers, and their workers far more than any national manufacturing strategy.

A final point: Lawmakers and policymakers need much better information on trade flows, on product networks, and global supply chains that better reflect the manufacturing marketplace of today.

For example, traditional trade statistics fail to account for the trade-in-value added among two or more countries. Our Bureau of Labor Statistics can track a job gained or lost in a local pub but cannot identify a job gained or lost from trade. We are using eight-track stereo statistics in an iPod world that do not reflect the activity or changes occurring in this fast-growing global marketplace. Accurate, timely and real-world data is a bipartisan goal I am convinced we can all work together toward.

I look forward to hearing today's witnesses, and again I thank Chairman Casey for holding this important series of hearings.

[The prepared statement of Vice Chairman Kevin Brady appears in the Submissions for the Record on page 41.]

Chairman Casey. Vice Chairman Brady, thank you very much. Unless there are other statements from our Members, we can move to our witnesses. I will introduce each of the witnesses and then we will go one by one.

Let me start on the audience's right and our left on the panel here with Dr. Mark Zandi. Dr. Zandi is the Chief Economist of Moody's Analytics where he directs the company's research and consulting services to businesses, governments, and other institutions. Dr. Zandi's research includes macroeconomics, financial, and regional economics. In addition, he conducts regular briefings on the economy and is frequently quoted in national and global news outlets. Dr. Zandi received his Ph.D. at the University of Pennsylvania. I'll stop and pause there for a moment.

[Laughter.]

We are proud of that. And he received his Bachelor's Degree from Wharton School at the University of Pennsylvania, as well, and we are grateful you are here, Doctor. Thank you very much.

Mr. Alex Brill is currently a Research Fellow at the American Enterprise Institute where he studies the impact of tax policy in the U.S. economy. He was formerly the senior adviser and chief economist to the House Ways and Means Committee. And he also served on the staff of the President's Council of Economic Advisers, in Congress, and at the CEA. Mr. Brill worked on a variety of economic and legislative policy issues, including international tax policy and U.S. trade policy. Mr. Brill graduated from Tufts University with a B.A. in Economics, and received his Masters in Mathematical Finance from Boston University. We are grateful you are here, and thank you for that, as well. My wife is a Massachusetts native, so I'm glad I mentioned both institutions.

Mr. Jay Timmons is the President and CEO of the National Association of Manufacturers, or so-called NAM, the largest manufacturing trade association in the United States, representing small and large manufacturers in every industrial sector. He became the National Association of Manufacturers President in January 2011. Mr. Timmons is a leading advocate for nearly 12 million Americans employed directly in manufacturing, educating the public, and policymakers on issues that affect this critical sector of the U.S. economy. He previously served as Chief of Staff to a Congressman, a Governor, and to Senator George Allen of Virginia from 1991 to 2002. Mr. Timmons graduated from the Ohio State University. Welcome, Mr. Timmons.

And finally, Scott Paul. Scott N. Paul is the founder and Executive Director of the Alliance for American Manufacturing, which was launched in April of 2007. AAM is a nonpartisan, nonprofit partnership established by some of America's leading manufacturers and the United Steelworkers to explore common solutions to challenging public policy topics such as job creation, infrastructure investment, international trade, and global competitiveness. Mr. Paul served as a staff member to the late Representative Jim Jontz from the State of Indiana and former Representative Peter Barca from the State of Wisconsin, and as the Chief Foreign Policy and Trade Adviser to then-House Democratic Whip David E. Bonior from the State of Michigan. Mr. Paul earned a B.A. in Foreign Service and International Politics from Penn State University—I mention that, as well; as well as an M.A. from Georgetown University's School of Foreign Service. Mr. Paul, we're grateful you are here.

So we will start with Dr. Zandi and then we will just go left to right.

**STATEMENT OF DR. MARK ZANDI, CHIEF ECONOMIST,
MOODY'S ANALYTICS, PHILADELPHIA, PA**

Dr. Zandi. Thank you, Senator Casey, and Congressman Brady, and the rest of the Committee for the opportunity to be here today.

I am an employee of the Moody's organization, but these are my views that I am expressing today. Just so you know that I am not just an egghead, I did start my own company and grew it into a pretty good sized small business, and sold it to the Moody's organi-

zation about five years ago. So I have also been a business person as well.

Let me make two broad points in my remarks. First, manufacturing plays a vital role in our economy, in the business cycle and in the economy more broadly. And that is clearly evident in the current economic recovery. Manufacturing has been key to the growth that we have experienced over the past two years. The economic recovery is now two years old.

In fact, just to give you a few statistics, in terms of output, GDP, manufacturing has accounted for over half the growth in GDP over the past two years. In terms of wages and salaries, it is about one-fifth of the growth. And in terms of jobs, one-tenth—although many of the temporary help jobs that have been created in the recovery are also very, they are on the factory floor. So I think the contribution is even greater than that.

One other interesting point: Manufacturing's contribution to this recovery, at least so far, has been greater than in any other economic recovery since World War II. So this is very important to our current economic prospects in terms of job creation and the growth in output.

Manufacturing's role in the economy also is key for a number of other reasons. It is very important to middle income America. There are no better jobs for middle class Americans than manufacturing. Just to give you a few more statistics, the average wage and salary per employee across the economy is just under \$50,000 a year. That is the average across all industries and occupations.

The average in manufacturing is over \$58,000 a year. Just for context, the highest-paying industry is in mining at \$90,000 a year. The lowest paying is in the leisure and hospitality industry of just over \$20,000 a year. So manufacturing jobs are very, very important to supporting middle-income households. We need these jobs to help support the middle class.

It is also important to recognize manufacturing's role in many small communities across the country in more rural areas, what I would call "quasi-urban areas," particularly from Pennsylvania, your home State, Senator, all the way across the country: Ohio, Indiana, Illinois, Iowa, Wisconsin. And then from Michigan in the north all the way down to Alabama and Georgia. That region is very dependent, and these are economies that are small. They are not very diverse. There is not a lot going on. These folks that lose jobs in these communities are stuck, in a sense, and many are under water on their homes. It is very difficult for them to move. And I think it is very important to these communities, this part of the country, to revive and support manufacturing because this is key to their economic wellbeing.

I should say, going back to the recovery, growth in these economies has been quite strong—and this is where a lot of the economic growth has been over the past two years.

Finally, one other point about the role of manufacturing. It is vital to innovation and productivity growth. This is the fountain of our growth in our living standards. Manufacturing productivity growth has been about 3 percent per annum over the past decade, compared to about 2 percent in the rest of the economy. More im-

portantly than that, a lot of what is produced in manufacturing goes to supporting productivity growth in the rest of the economy.

So, for example, my business is economic consulting. I build a lot of models, and I rely on very sophisticated telecommunications equipment and other kinds of computer technology, data processing, and I could not do it unless I had a very productive manufacturing base.

So point number one is that manufacturing is very important.

Point number two—and I am not going to go into any detail; I am sure we will in the Q&A—but there are in my view a number of things that policymakers can do to help support manufacturing in terms of opening up global trade. You mentioned the Chinese currency. I think that is absolutely vital to address. Nothing is more important from a macro economic perspective for manufacturing than to get these currencies better aligned. They are not aligned, and that is a significant competitive disadvantage for all manufacturers—and increasingly other businesses as well.

Also, policies to lower the cost of doing business. Cost of labor, cost of capital—going back to corporate tax reform; cost of transportation and distribution. This goes to our infrastructure, which is sorely lacking. And finally the cost of energy. Manufacturers are very energy-intensive industries and we need to focus on trying to provide lower-cost energy sources—for example, using the natural gas resources that are clearly evident in many parts of the country and is quite cheap and can fuel our manufacturing firms long into the future.

So I would be very happy to discuss a range of policy options with regard to all of those things, but I think you have a very important role in supporting the manufacturing base, and that is vital to our long-term economic future.

Thank you.

[The prepared statement of Dr. Mark Zandi appears in the Submissions for the Record on page 43.]

Chairman Casey. Doctor, thank you very much. I should have mentioned, your full testimony will be part of the record, and that is the case of all of our witnesses. You were very close to the five-minute mark, and that is good.

Mr. Brill.

STATEMENT OF MR. ALEX BRILL, RESEARCH FELLOW, AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH, WASHINGTON, DC

Mr. Brill. Thank you very much, Chairman Casey, Vice Chairman Brady, other Members of the Committee:

Thank you for the opportunity to appear this morning to discuss the manufacturing sector and my perspectives on sound fiscal policies to promote fundamental long-run economic growth.

I would like to stress two points in my remarks this morning.

First, while manufacturing employment is and has been in decline, productivity growth in the sector is robust.

Second, policymakers should seek to establish broad economic policies that permit the U.S. economy to evolve as market forces dictate, and not pursue narrow industry-specific economic policies.

Manufacturing, a wide-ranging set of industries, including automotive parts, semi-conductors, and food production, has long been a significant driver of economic growth in the United States and abroad. Total manufacturing output declined during the recession and has yet to fully recover. But true to its reputation for driving economic growth, manufacturing labor productivity increased 4.1 percent over the last four quarters.

Manufacturing employment, as others have noted, was hit particularly hard by the recent recession. Nearly 2 million jobs were lost in the 18 months ending December 2009, but manufacturing employment has been declining in the U.S. since its peak in 1979, even in nonrecessionary periods.

In light of this, we should not expect a sizeable increase in employment in this sector, even as the economy recovers more fully and output increases. The explanation is productivity growth. While the ability to produce more output with less labor input can reduce employment in manufacturing, such productivity growth is the means by which our standard of living increases.

In short, the manufacturing sector today is evolving similarly to the agriculture sector a century before. The downward trend in manufacturing employment prompts some to conclude that the government should give special assistance to this sector. This approach in my opinion is ill advised. Policies aimed at steering research toward one sector can harm other sectors as resources are misallocated from one activity to another.

The significance and importance of manufacturing in the United States economy is undeniable, but it is critical to recognize that manufacturing is but one sector of a large and robust U.S. economy.

The role of policymakers should be to establish broad, effective, and stable policies that permit the U.S. economy to grow as market forces dictate. Given that objective, policymakers should not seek to develop targeted subsidies or narrowly tailored economic policies for a single sector.

Instead, long-run economic growth should be pursued by improving the U.S. business environment as a whole. Pursuing such structural reforms will benefit the manufacturing sector directly by improving our competitiveness and reducing costs and impediments, and indirectly by encouraging growth across the entire economy and thereby increasing demand.

It is important to recognize the myriad distortionary non-neutral policies that already exist. One clear indication that the Federal Government has taken a special interest in the manufacturing sector is the creation of the Commerce Department's manufacturing initiative and the establishment of www.manufacturing.gov, a website address name which I consider to be an oxymoron in a free-market economy. But policies that favor manufacturing over other industries go beyond dedicated website and agency initiatives. One such policy is a specific tax preference. Section 199 of the Internal Revenue Code allows for producers of manufactured goods to claim a deduction approximately equal to 3 percentage points reduction in the income tax rate on such income.

One way to reduce the distortion described above and mitigate other important harmful distortions of the corporate income tax

system would be to significantly reduce the U.S. corporate tax rate. Replacing Section 199 with a simple and significant reduction in the corporate rate, perhaps to 25 percent, would both level the playing field between manufactured and nonmanufactured production, and improve the general competitiveness of all U.S. corporations.

Corporate tax reform is not the only necessary change, just one critical step that would go a long way toward achieving a more neutral fiscal policy which would be to the long-term benefit of the manufacturing sector and the economy at large.

I believe that we cannot subsidize our way to prosperity; rather, we need sound business policy that facilitates a level playing field for all industries and promotes general economic growth.

[The prepared statement of Mr. Alex Brill appears in the Submissions for the Record on page 56.]

Chairman Casey. Thank you, Mr. Brill.

Mr. Timmons.

STATEMENT OF MR. JAY TIMMONS, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL ASSOCIATION OF MANUFACTURERS, WASHINGTON, DC

Mr. Timmons. Well thank you very much, Chairman Casey and Vice Chairman Brady, as well as Members of the Committee:

I really appreciate having the chance to speak to you today about manufacturing in the United States because I truly believe in the power of manufacturing, not just for families but for our country as well.

Back in the 1930s, my grandfather left the farm and he stood in line for six months at a local manufacturer waiting for a job at that facility because he knew then what so many manufacturing employees know today: that a manufacturing job paves the way to the middle class. And it did so for my family at that time.

Today I am President of the National Association of Manufacturers and, Mr. Chairman, as you mentioned, we are the largest manufacturing trade association in the country. We represent about 12,000 members of all sizes, and we are the voice of 12 million Americans who work in manufacturing.

I think it is safe to say that we are all frustrated with the pace of the economic recovery. In fact, a recent Washington Post poll found that a majority of Americans actually think the recovery has yet to begin.

Manufacturing can lead the recovery in the months ahead. Since the end of 2009, as some have already mentioned, manufacturers have created about a quarter of a million new jobs. That is about 14 percent of employment growth. But that number really pales in comparison to the 2.2 million jobs in manufacturing that were lost during the recession.

But the slightly brighter picture simply cannot be taken for granted. After months of consistent job gains, manufacturers actually lost 5,000 jobs in May. So clearly we have a lot of work to do.

As this Committee considers ways to improve the business climate in the country, I ask that each of you focus on a very basic and fundamental question: Will this policy—whatever policy you

are deliberating—help our country create jobs and compete successfully in the international marketplace?

Today it is 18 percent more expensive to manufacture a product in the United States than it is in other industrial economies. Other countries are racing ahead and adopting pro-growth policies and leaving the United States behind.

For instance, the corporate tax rate. The United States is moving in the wrong direction. As other countries have reduced their rates, the United States is standing still. We currently have the second-highest corporate tax rate in the world, behind Japan, which recently delayed its rate cut that would have pushed the United States into the number one position.

Another concern is our regulatory burden. Onerous regulations stifle jobs and economic growth. They are a trillion-dollar-plus weight on job creators.

Then there is trade. The Colombia, Panama, and Korea Free Trade Agreements have languished for four years. The Wall Street Journal recently reported that Colombia is looking to increase trade ties with China, noting that the agreement with the U.S. is, quote, “the deal we want more than any other,” the Colombia trade minister said “we can no longer sit” with its arms crossed waiting for the United States to act.

This trade agreement will enhance manufacturers’ already significant market in Colombia. Manufacturers simply are waiting for action, and we cannot allow these barriers to growth and jobs to continue to stand.

There are 120 other Free Trade Agreements being negotiated around the world, but the U.S. is only party to one of those. We are ceding our market share to our competitors.

There are so many other policies that are causing us to stand still, but there are also policies that are actually turning the clock back. Permitting is time consuming and discourages additional investment. Excessive new regulations continue to mount.

For example, the Environmental Protection Agency’s proposed ozone standards. Once these rules are on the books, communities across the Nation would suddenly be in violation of the Clean Air Act. Many manufacturers would have to put their plans to expand or modernize on hold.

According to a study by the Manufacturing Alliance, these new rules could cost as many as 7.3 million jobs by 2020 and add up to \$1.1 trillion in regulatory costs annually between 2020 and 2030.

Our competitors are not trying to hamstring their economies and job creators this way. They are actually looking for ways to take our mantle of economic leadership away from us, and we ought not to be unintentionally helping them do so.

Mr. Chairman, I can’t recall that I’ve ever met an American who complains that our country manufactures too much. Support for manufacturing transcends ideology and party lines as we see here today, but we have got to take that broad support and turn it into action.

Whatever policies Congress and the Administration ultimately decide to adopt, they should be designed with the specific purpose of making the United States the best place in the world to innovate, to manufacture, and to do business.

I have outlined a number of specific policy proposals in my written testimony that I invite you all to review. American manufacturers are unmatched in their ingenuity, innovation, and resourcefulness. Manufacturing is poised for a renaissance that can lead to a robust economic recovery, and our government simply must enable that to happen.

Thank you so much.

[The prepared statement of Mr. Jay Timmons appears in the Submissions for the Record on page 62.]

Chairman Casey. Thank you, Mr. Timmons.

Mr. Paul.

STATEMENT OF MR. SCOTT PAUL, EXECUTIVE DIRECTOR, ALLIANCE FOR AMERICAN MANUFACTURING, WASHINGTON, DC

Mr. Paul. Thank you, Chairman Casey, Vice Chairman Brady, and Members of the Committee:

I want to thank you for inviting me to testify today on behalf of the Alliance for American Manufacturing, and I first ask permission to include supplementary materials into the record.

Chairman Casey. They will be included.

Mr. Paul. Thank you. AAM is a partnership formed by some of America's leading manufacturers and our largest industrial union, the United Steelworkers, with one goal: strengthening American manufacturing, and therefore our Nation's economic and national security.

In an increasingly intense partisan climate, we believe that our labor-management approach can help identify appropriate avenues for cooperation. I will say that the idea of a manufacturing strategy is hardly a radical concept, and a robust strategy has been at the core of American economic policy for all but a few brief periods of our history.

Today's dearth of public policy to boost manufacturing is the exception, not the rule, dating all the way back to our Founding Fathers. Indeed, Alexander Hamilton constructed America's first industrial policy in 1791. I encourage you to read it. A policy that continued until the end of World War II. Globalization and economic approaches favoring imports and domestic consumption over exports and production have helped to steadily erode manufacturing as a percentage of our GDP, private sector employment, and other key measures.

The idea of a manufacturing strategy is also not a partisan one. President Reagan, spurred on by a Democratic Congress, adopted a flurry of measures to counter a grossly imbalanced trade relationship with Europe and Japan in the 1980s. The Plaza Accords, which raised the value of currencies in Japan and Europe relative to the dollar in a managed way, had a positive effect in lowering our current account balance over time.

Key government investments under the Reagan Administration in the semiconductor industry and other technologies spurred their development in commercialization. President Reagan signed into law enhanced Buy America requirements for certain infrastructure projects to boost domestic employment.

More recently, President Obama and Congress worked together to provide loans and breathing space for our domestic auto industry, which they needed to rebuild and thrive. The effort wasn't perfect, but it was a necessary step to stabilize one of the support structures for domestic manufacturing.

As important as that step was, it was an emergency room strategy and not a long-term effort to grow manufacturing jobs capacity and output. The case for a permanent manufacturing strategy could not be stronger when one considers that no matter how innovative or competitive individual manufacturers may be, there are some problems that simply cannot be solved on their own—as recently articulated by Jared Bernstein at the Center on Budget and Policy Priorities. For instance, research and development can be very expensive and hard to capture profits, for instance, in advanced batteries.

No single firm could possibly coordinate national projects like the smartgrid or the Internet. Firms often need assistance in applying academic innovations to the production process. Manufacturers often face barriers to accessing credit for entry, expansion, and innovation. And manufacturers need assistance in exporting as well as pushback against unfair trade practices.

We need a robust manufacturing strategy because the fate of the industrial sector of our economy is too important to be left to a gaggle of competing and ultimately unsatisfying theories of why it has been declining.

The decline of manufacturing is not inevitable, desirable, nor can it be explained solely through theories of churning capitalism, advances in productivity and technology, high regulatory tax and compensation costs, or inefficiency.

For instance, let's look at Germany. Germany's global shares of manufacturing output and exports have held steady over the past decade, while America's have declined and China's have risen sharply. Yet Germany is not a low-cost country in which to manufacture. Average manufacturing wages in Germany are \$48 an hour; in the United States they are \$32. Germany has an integrated strategy for boosting manufacturing focusing on skills, technology investment, demand side incentives, labor/business/government collaboration, and aggressive trade policies which allow it to successfully compete.

Germany is a world leader in advanced manufacturing in solar production because it wants to be, and all stakeholders work together to make it successful. How does Germany have a balanced trade relationship with China when the U.S. runs monthly trade deficits more than \$20 billion? Because it matters in Germany more than it does here.

What does America need to create more manufacturing jobs? I will summarize these recommendations which are included in my written testimony.

First, we have to deal with Chinese currency manipulation. Dealing with this manipulation would have a far more reaching impact than passing any individual free trade agreement. The benefits to GDP, to employment, and to deficit reductions would be extraordinary.

Second, we need to counter China's other cheating on indigenous innovation, its web of industrial subsidies, and state-owned enterprises, its rare-earth minerals export restrictions, and its rampant intellectual property theft.

The simple truth is, when we act, when we stand up and enforce our trade laws, we do get results. And it is helping companies all across our Nation, including those in Pennsylvania and in Texas.

Second, we should retool the Obama Administration's export initiative to focus on a zero trade deficit, rather than merely increasing our imports. We should also make positive tax changes. Senator Stabenow outlined some of these, as well as a number of members from the dias here, including accelerated depreciation. But what we do not want to do is offset a corporate tax rate reduction with reductions in deductions for manufacturing.

Ernst & Young estimates that such an approach could sock manufacturers with a \$48 billion bill and be a windfall for Wall Street.

Fifth, while we should eliminate unnecessary and duplicative regulations, winning a race to the bottom is something that the United States does not want to engage in.

Sixth, we need to invest in infrastructure and establish a national infrastructure bank.

And finally, we need a skills and training infrastructure that is far more advanced than it is today. We are simply falling far behind.

We look forward to working with the Committee as manufacturing strategy hits the agenda in the Congress. Thank you very much.

[The prepared statement of Mr. Scott Paul appears in the Submissions for the Record on page 76.]

[The EPI Briefing Paper article titled "The Benefits of Revaluation" appears in the Submissions for the Record on page 86.]

Chairman Casey. Thank you, Mr. Paul. Everyone was close to their time, and you were actually under time. That is pretty impressive. We are grateful for that.

I will start the questions, and then Vice Chairman Brady will go. By way of order of appearance, I will get that list so that Members of the Committee know when their turn will come up.

Mr. Paul, if you don't mind, if you will take your breath for two seconds, I wanted to start with you. I was glad you walked through those recommendations because I think today we get a sense from everyone who has spoken from a microphone that we have all diagnosed the problem, and that there is certainly more analysis and more diagnosis we could do. But I think it is time for all of us to move to the list of ways to improve this picture on manufacturing.

One of the—and I am glad you went through some of your recommendations, and I will ask our other witnesses, as well, but one of the points you made, and you were able to make part of it, but I was noting in your testimony, when you start on page 6 with the recommendations, the first one you make is, and I am quoting:

"First, pass legislation to allow American workers and firms to seek relief from the effects of currency manipulation by China and other countries using our existing trade laws." Unquote.

Later in that paragraph you say that America would see a significant boost in GDP, up to 1.9 percent, 2.25 million more jobs,

and \$71 billion annually in deficit reduction. And I would ask: By doing what?

Mr. Paul. Sorry, let me turn on the microphone here.

A number of economists, and Dr. Zandi identified Paul Krugman, but it actually extends—in fact, Alan Greenspan mentioned this last week—that China’s currency manipulation is one of the most harmful policies out there, preventing not only manufacturing growth in other industrialized and industrializing countries, it not only affects the United States, it affects countries like Brazil as well, but it is a—it contributes to global imbalances and hot money flows.

And it becomes a vicious cycle that is hard to get out of. I will say that a year ago China announced that they would revalue the yuan, and they did take it off of peg, and it has appreciated, although arguably not nearly enough, and it still remains, as you indicated, grossly undervalued, somewhere between 30 and 40 percent.

We have tools within our trade laws that we can deploy, that we have deployed on subsidies, that we have deployed against dumping, that with a couple of tweaks we can also apply to currency manipulation. And it could certainly produce results, but it would at least give our industries, our workers, a tool in the trade laws that they do not have currently to deal with this unfair currency manipulation from China.

I mean, a desirable approach—and I will be candid about this—would be for the Administration to negotiate with China in a manner similar to the “Plaza Accords.” I have not seen that willingness, and so I think we need to see Congress step up to the plate.

There is bipartisan legislation, I would add. It passed the House of Representatives overwhelmingly last year. There were not many bills that got overwhelming Democratic support and attracted 99 Republicans, and I think that is something the Congress should do immediately.

Chairman Casey. I am glad you focused on that. I think it is critically important. The important point here is I think sometimes when people here, folks like us in Washington talking about China currency, I guess it can sound like a, oh, I don’t know, a Congressional complaint, a pointing a finger at a country, but the reality is just as you and so many others have stated.

This is—if it is not the key thing we have got to do, it is in the top two or three. And the evidence is irrefutable. And as you noted, there is bipartisan support. But one of the most important things you said was, as much as I and many others are working on new legislation, we can do a lot right now. The Treasury Department can do more.

The Commerce Department can do more. This Administration can do a lot more to aggressively enforce existing law.

And again let me say it for the record, in your testimony, you were referring to the Economic Policy Institute, correct?

Mr. Paul. [Nods affirmatively.]

Chairman Casey. If China appreciated their currency at a market-based level over the next two years, America would see a GDP increase of 1.9 percent, 2.25 million jobs, and a \$71 billion deficit reduction impact annually.

Let's say they are wrong by a little bit. If we got a fraction of that from one policy, it would still be dramatically significant. So we will get to more questions about this and other recommendations from our other three witnesses, but I wanted to make that point.

I am out of time on this round, but I will turn to our Vice Chairman Brady.

Mr. Paul. Thank you, Mr. Chairman.

Vice Chairman Brady. Thank you, Mr. Chairman. I do think, if America's manufacturing policy is going to be to blame China for our manufacturing challenges, we will be sorely mistaken.

It is one in a plethora of challenges facing American manufacturing, many of them home-grown, unfortunately. And I think that is what this hearing has already revealed. You know, I appreciate Germany's leadership. Your mention of Germany's leadership during the global financial crisis, it was a leader in the G-20 to encourage countries to wind down their fiscal stimulus and to begin to get their financial house in order.

Unfortunately, America was the outlier in that discussion. I wish we had listened more closely to them. I am not a fan of the Stimulus. Here we have spent eight hundred and some billion dollars. We actually have 1.5 million fewer workers today than when all that Stimulus began.

Our factory orders are down. Consumer confidence has receded to its point six months ago. Manufacturing is struggling in four of our key Reserve Board regions. Unemployment was projected, if we spent all that money, to be 6.5 percent this quarter. Unemployment, long-term unemployment is at near record highs.

The Stimulus missed, in my view, by a mile. And now we have 13.5 million people still without jobs. So I disagree with the assessment that the Stimulus has succeeded.

So my question I guess, to begin with Mr. Timmons, listening to your manufacturing members, are your members clamoring for another jobs bill out of Washington? Or are they anxious for Washington to get out of the way of this recovery, to reduce the costs and regulations and barriers that would allow them to make the private business investment that allows jobs to be created? What is their view?

Mr. Timmons. Well I think if you enact legislation that reduces costs and barriers, in effect that is a jobs bill. As I mentioned in my testimony, it is 18 percent more expensive to manufacture in this country than it is in other industrialized nations. And that is when you take out the cost of labor. I think that is a very important distinction.

That 18 percent includes several factors, but the majority of that cost is related to our tax burden, our energy costs, our regulatory burden, and our tort burden.

We have the capacity here in this country to reduce many of those costs and barriers on our own. You mentioned that we cannot simply blame other countries—let's say China—but the policies in those countries do make a difference. And some of the points that were made here about China's inability to protect intellectual property, or the production of counterfeit goods, and certainly currency manipulation are large factors.

Those are things, though, that are obviously more difficult for us to deal with. The things that we have asked Congress to really focus on are those other areas that I just mentioned: taxes, energy cost, regulation in particular, as well as acting on the three pending trade agreements, and enabling the President to negotiate other trade agreements around the world so that we are not ceding market share to other countries.

Vice Chairman Brady. This Congress is looking at a policy—you mentioned trade. As you know, it is not enough to simply buy American anymore, we have to sell American all throughout the world.

Mr. Timmons. Exactly.

Vice Chairman Brady. We find the world tilted against us. Trade agreements take one-way trade into the United States and create a two-way trade, and create jobs as a result.

Mr. Brill, how important is it to America's manufacturing that we aggressively open new markets, pass trade agreements to level that playing field, and seek more opportunities especially in the Asia Pacific, the growing Asia Pacific region so our manufacturers can compete and win in those areas?

Mr. Brill. Vice Chairman Brady, it is critical that we have a trade policy, one that not only relates to our manufacturing sector but to all our sectors that engage in global trade, one that is reducing barriers and opening markets.

As others have noted, and as you noted yourself, the pending agreements before Congress are long overdue. The policy seems to be a wait-and-hold policy, unfortunately. By delaying the implementation of the pending agreements, we are disadvantaging our ability to advance our exports.

However, more concerning is, as Mr. Timmons noted, the lack of TPA, lack of the ability to create new agreements going forward. Eventually I hope we will get the agreements that are pending, but I am concerned by the fact that we do not have the tools to further open new markets.

Vice Chairman Brady. Right. Thank you, Mr. Chairman.

Chairman Casey. Congressman Duffy.

Representative Duffy. Thank you, Mr. Chairman.

Thank you, panel, for coming in today. This phrase of uncertainty may be overused over the last year, but it is a term that I continue to hear as I am in my District talking to our manufacturers. And when I ask them to explain what do they mean when they talk about uncertainty—because a lot of them are saying they are making more money, they are more productive, but they are not rehiring. And I think we are seeing that across the country.

And oftentimes they will, in different terms, talk about the debt. And I will say, well what does that mean to you? Well they are concerned then about inflation. They are concerned about interest rates going up in the long term. They are concerned about tax increases that have been discussed here in Washington. We do not have a long-term tax policy. We seem to be going year by year.

And in my area—I am in the northwest quarter of Wisconsin—there is a lot of concern about what is happening with the EPA. We have a large forest products industry in my District, and all

those things are coming together and creating uncertainty. They are not taking the risks they normally may take.

Are you all seeing that in your studies, or your conversations, that the uncertainty not necessarily from the business side of things but actually from the government side of things is affecting our willingness of our manufacturers to expand and grow?

I will throw it out to the panel as a whole for anyone who wants to take a stab.

Mr. Zandi.

Dr. Zandi. Yes. I think there is something to that argument, yes. I think that American businesses in aggregate are in very good financial shape. You know, we had to make a distinction between the very large companies and smaller companies that are not doing quite as well.

But in their totality, they are very profitable. Their profit margins are very wide. They did an admirable job getting their cost structures down during the recession. It is really no longer in my mind a question of can businesses hire more. It is really a question of willingness. And that goes to confidence.

There are, I am sure, a melange of things that weigh on confidence. Part of it is we went through the Great Recession. You do not forget that quickly if you are a business person. And I do think policy uncertainty has played a role.

Some of the policies come to fruition—health care reform—and I am not speaking to the merits of any of the policy itself—but just the fact that we have gone through these very significant debates and discussions. Health care reform, financial regulatory reform. We did not nail down the Tax Code until the very end of last year. We debated things, Congress debated things that did not come to fruition but made business people nervous: cap and trade, immigration policy, card check.

I do think that the policy uncertainty is fading. There has not been a major legislative initiative in the last six months. But I do think the one thing that—and I speak to a lot of business people in my work in lots of different industries all across the country—the one thing that makes them very nervous at this point is they cannot construct a narrative in their mind as to how Congress and the Administration are going to come to terms on first the debt ceiling, and then ultimately on our fiscal situation.

And unless they can figure that out, they are not going to fire people, but they are going to be very slow to hire people. Because as you point out, that means potentially higher interest rates; it means potentially higher taxes. It could mean massive changes in government programs. And those things make people very nervous, and that needs to be nailed down.

Representative Duffy. And to piggyback on that point, I think what we are seeing is more of our manufacturers asking their current employees to work overtime, or they are asking for temporary workers, instead of engaging in some long-term hiring, even though the work may be there. And they are talking about these same issues that I brought up, but also what you referenced as the health care bill as well.

What is it going to cost in health care to hire a new employee? I mean, just specifically are you guys aware of the EPA's Boiler

MACT proposed regulation? In paper manufacturing we use industrial boilers. And at a time when we are under immense competition from China, which I think is unfair competition, we are struggling to stay alive in central and northern Wisconsin with our paper manufacturers, and it is a huge part of our economy.

And these proposed regulations, which are going to increase American standards which are already far above Chinese standards, in the end are going to drive American jobs overseas. And I think if we look at our environment, we are all drinking the same water and breathing the same air. And to send our jobs and our manufacturing to China where they have far less standards than we do just does not make sense.

And again, I think the policies are coming from Washington that are making it more difficult for our manufacturers to compete on the global stage.

And obviously you guys are aware of the Boiler MACT proposal.

Mr. Timmons. Boiler MACT could severely harm the paper industry. It is good that there is a bit of a delay there, but there are several other regulations that are coming down the pike. I have already mentioned the ozone regulations. There's potential regulation of carbon dioxide from the EPA. The recent decision by the NLRB to cite Boeing and try to tell them where they can locate a production line, all of these things factor into a business's decision on where they are going to do business. You know, are they going to do business in the United States, or are they going to emigrate? Or are they going to evaporate?

And I do not think anybody in government wants to see businesses evaporate or emigrate. So our job really needs to be to provide certainty and stability, deal with the Tax Code, including provisions that expire at the end of the year and deal with the regulatory over-reach that we have seen from so many agencies in order to make the business climate more stable for American business.

Representative Duffy. And I would agree with that. And, Mr. Chairman, I would yield back the remainder of my time.

Chairman Casey. Thanks so much.

Congressman Mulvaney.

Representative Mulvaney. Thank you, Mr. Chairman.

Gentlemen, I will begin by saying that as we talk about manufacturing policy, I am one of the ones who would tend to focus on leveling the playing field as opposed to having the government get involved in specific programs.

We heard some testimony from Senator Stabenow before, and I think one of you gentlemen mentioned the Japanese policies on advanced batteries. I think for every success story that a government can point to like that, there are more and more failures.

I remember when I was a kid I think the Japanese government was involved in the beta research for Betamax, and then more recently I think they were heavily invested in plasma TVs versus LEDs, or something like that. So I think every time there is one of those success stories, there are a lot more failures. The government simply does not have the information or the proper motivation available to it to make decisions about where investments are properly made.

So I am one of those landscape, level the playing field type of guys. So I want to talk about that for a few minutes and see if there are a couple of things that we can agree on as a panel.

One of the things that seemed to be consistent across all of your testimonies was the importance of any government policy to allow business to be more efficient, to lower its labor and capital costs, to lower its transportation costs, in order to encourage it to grow.

Dr. Zandi, you mentioned specifically something that I am familiar with, having been in the housing industry, about people being stuck in a particular location. And I think the free flow of labor and capital is one of the things that any government policy should rightly encourage.

Is there anybody, by the way, who disagrees with that?

[No response.]

Representative Mulvaney. Good. Like I said, I am new here so I am still trying to figure out a way to find things that we can agree on. As we sit here and say—there are folks here that Democrats have invited, folks the Republicans have invited, there are folks here who consider themselves to be Independent—as we sit here and say that the free movement and labor and capital should be the goal of all government policies on this, is there anybody here who wants to defend what the NLRB is doing to Boeing? And I will put that to anybody.

[No response.]

Representative Mulvaney. I will take your silence as support for the fact that it is absolutely wrong; that what is happening here is the government is telling this business where it can do business. And I just wonder if anybody thinks—I want suggestions on how to fix this, gentlemen.

As we sit here today and talk about a manufacturing policy, what can we do in order to encourage the free flow of labor and capital? And if getting rid of the NLRB is an answer, let me know about it. But I would throw it open to the panel as to what you think we can do in order to accomplish exactly what you gentlemen have suggested.

Mr. Paul. Mr. Mulvaney, if I—

Representative Mulvaney. Mr. Paul, and then Dr. Zandi.

Mr. Paul [continuing]. Sure. I want to turn your question on its head a little bit. One of the peculiar aspects of our economic strategy in the United States is that we have a lot of interstate competition for jobs.

And I am not saying that is unique in the world, but we engage in this race through incentives, either positive or by reducing regulations between states. Ultimately, we have to compete with Mexico, China, and other countries that will be able to have lower labor costs, and lower regulatory burdens.

To think we lack that other countries do, and they do it successfully, is not an economic development strategy. And it does not mean the government is telling you where you can put your factory. It does not mean that at all. But it does mean some sort of a national strategy is needed with the knowledge that we are competing against other countries.

There is a bill that Senator Warner and Congressman Wolf, a bipartisan team, introduced that said if you want to reshore work to

the United States, the Federal Government will match that in a way to provide an incentive. That is what other countries do.

We are pretty unique in the fact that we do not have an economic development strategy like that.

Dr. Zandi. I think the way you articulated it was exactly right with regard to the free flow of capital and labor, and I think that would define a national manufacturing strategy, policies that can help facilitate this free flow of capital and labor.

Let me just focus on labor for a second and give you a couple of ideas that might help with respect to that.

First is reform in the Unemployment Insurance system. I think manufacturers have very high Unemployment Insurance costs particularly in the current context because many states obviously have had to take on loans from the Federal Government to pay for their UI, and this bill is coming due, and that bill is going to be paid by businesses, particularly manufacturers. The cost to them is going to be quite significant. So you could provide some relief to help in that regard in the near term.

And then I would also make some broader changes to the UI system. One reason why the German economy that has come up in this context a couple of times has done so well is because they have a work-share program in UI so manufacturers do not have to lay off workers. They can distribute the pain among older workers by cutting back hours, and so they do not lose very skilled workers and laborers in a recession. They can hold on to them. And that is very important for manufacturers because these are very skilled employment.

Also, we should reform our UI system to allow unemployed workers to get those benefits for their own retraining. So there are programs that we have been testing, that Congress has been testing in this regard. So the UI program is a really good place to look in terms of trying to help manufacturers.

Second, immigration policy. I think the hidden gem in our economy is our university system. It is going to take 100 years for any country on the planet to replicate what we have done in our university systems. That is our significant comparative advantage.

I think if any foreign student comes to our country, gets a degree from the University of Pennsylvania, Ohio State, or the University of Wisconsin, they should get a visa to stay. They've earned it. These are the best and the brightest in the world, and they are going to be the fountain of the future business formation and job creation in manufacturing.

And third, just thinking a little outside the box for you again with regard to labor costs, there is this really interesting movement that I have observed among manufacturers and universities. The manufacturers are saying, look, I've got a big skill mismatch problem here, particularly because my workforce is old, it is aging, it is going to retire, and the young folks that are coming up, they are just not interested in learning these skills.

So these companies are going to universities and saying, hey, I will give you money. You take that money. You go hire faculty. You build a lab. You build an office building. And just let me have an input into your curriculum process. And, you know, this solves a lot of problems.

I think policymakers can really help facilitate this. And there are different ways of doing it, but one way is provide matching grants to universities that participate in this kind of process. And I think that would be very helpful in addressing this jobs skill mismatch. That is going to take a little bit of work to iron out all the details on sort of a lot of issues with respect to, you know, universities are very sensitive about ceding any kind of academic freedom, and I'm there. I understand that. But I think this would be a good way to solve a lot of problems.

Representative Mulvaney. Thank you, gentlemen. Good ideas. Thank you, Mr. Chairman.

Chairman Casey. Thanks very much. Dr. Zandi, and our whole panel, I know we are running low on time, but I wanted to ask you again about parts of your testimony and the dos and don'ts. I will be affirmative and focus on the dos. But I need to correct one thing for the record. When you mentioned great universities, and I am glad you said Penn when you mentioned Ohio State, which is a great university, I wanted to make sure that Penn State gets in there too.

Dr. Zandi. Well I thought that would be piling on, if I, you know—

[Laughter.]

Vice Chairman Brady. Did you leave Texas A&M out by accident?

Dr. Zandi. Absolutely.

[Laughter.]

Vice Chairman Brady. Thank you.

Chairman Casey. But thank you for the reference to Ohio State. Appreciate it. That won't come out of the Vice Chairman's time. He has got plenty of time.

But, Dr. Zandi, can you go through some of the dos in what we should do in your testimony? I know you referred to one or two, but maybe just by way of a quick list and then maybe I can open it up to the others, as well.

Dr. Zandi. Sure. I focused on labor in my previous remarks, but I think we can also do things to help facilitate the flow of capital, lower the cost of capital with respect to lowering the cost of transportation and distribution which is so very important to manufacturing. And also energy, as I mentioned.

In terms of the cost of capital, I would focus on two things—and then I will stop because I do not want to take too much time—but I do think corporate tax reform is vital. And I think it needs to be considered in a comprehensive way, that I think our goal should be to flatten the tax base—you know, try to scale back as many deductions, or eliminate any deductions and credits in the Code that we can so that we can bring down the marginal rates, and we can lower the marginal and the effective corporate tax rate for American businesses.

I know there is a lot of debate, and you can hear it here, about how high are corporate taxes. It is almost irrelevant to me. It is a plus if we can lower them, and that is what we should work to do, and I think we can do that by addressing the Swiss cheese in our Tax Code.

The other thing I would do is, now going to small manufacturers, and one of the beauties of manufacturing for our broader economy is it is not only big companies. You know, people don't realize this: there are a lot of small manufacturers tucked away that are very productive. They have got a market niche. They are very competitive. They are sitting in Lancaster County, or around Pittsburgh, or in Ohio, and Wisconsin. You know, all those forest product companies, they are not big. These are small to midsized companies.

I think—and there has been a lot of discussion about how these companies cannot get a loan, debt capital, going to the bank and getting a loan, and I think that has been an issue. I am less concerned about that now. I think it is starting to improve itself. But the one thing that really worries me in this regard is there is a lack of equity capital—that this is where the dearth is.

We do not have investors taking an equity stake in these companies. And there's a lot of reasons for that, but I think there is a role perhaps for government to play here not directly making equity investments—I would not advocate that—but actually helping finance indirectly through different means to provide equity capital to—and don't pick winners. Don't try to pick winners and losers, but let the professionals do it; let the marketplace do it; but help facilitate that process.

So those are two things I think we need to focus on in terms of the cost of capital, and I will stop right there.

Chairman Casey. Anyone else? I've got a little more than a minute.

Mr. Brill. Sure. Thank you. I would just make a couple of quick points. Obviously in my opening remarks I talked about the importance of corporate tax reform and bringing down rates.

I would like to endorse Dr. Zandi's comments about the values and opportunities from UI reform. That is an opportunity I think where we can really improve our labor markets in manufacturing and elsewhere.

With regard to your comments earlier, Congressman Mulvaney, about capital, I think that was an excellent point. I think we need to pursue strategies to facilitate the mobility of capital. And that would include inbound investment, encouraging—reducing—lowering barriers to encourage foreigners to invest here in the United States, “in-sourcing” as it is commonly referred to.

But we also have to recognize that there are benefits for U.S. firms to be investing abroad, as well. There are a number of concerns that I share with regard to China and some of their activities, but we should also recognize that China is a large customer for U.S. manufacturing, and we will all be better off if we are facilitating both inbound investment and permitting U.S. manufacturers and others to appropriately invest globally.

Mr. Timmons. Mr. Chairman, I would like to—

Chairman Casey. Mr. Paul, you are down to 22 seconds.

Mr. Timmons [continuing]. I would like to respond to your question, but I also want to point out skills curriculum at universities that was mentioned by Dr. Zandi. We are really pleased that the President endorsed the skills' certification system that NAM set up. It is a national skills' certification system, and it involves community colleges. And I think it is very important that we do not over-

look the importance of community colleges that can help us with addressing our skilled workforce issues.

Comprehensive tax reform clearly, corporate tax rate reduction, is at the top of our list. Also, an energy policy that enables us to utilize our domestic resources. That is going to require some active engagement by Congress and the Administration.

And then I would suggest that Members of Congress ask really hard and pointed questions, as well as provide the proper oversight to the regulating agencies. One very quick example.

OSHA recently withdrew a proposed regulation to require manufacturing facilities to purchase hundreds of millions of dollars worth of noise abatement equipment to accomplish the same goals that are achieved through those little five-cent foam pieces of ear protection equipment.

It did not make any sense. They did eventually withdraw it, but the real question is who had the time to come up with this in the first place. We need some very, very careful and strong oversight by Congress on what the regulatory agencies are doing right now.

Chairman Casey. Congressman—I want to have Congressman Mulvaney jump ahead. Mr. Paul, we will try to give you some extra time.

Representative Mulvaney. Thank you, Mr. Chairman. I have got one last question, gentlemen. I appreciate, again, you sticking around. I have heard, again, across the entire panel today a consistent message about corporate tax reform.

Dr. Zandi, I think you used the word “comprehensive.” You also mentioned the role of smaller-sized manufacturers.

Mr. Timmons, I put this to you. How critical is it when we sit and talk about corporate tax reform here that it goes just beyond the C corporation level and moves down to the S corporation level?

Mr. Timmons. Well thank you for asking that question, because it is critical. Seventy-two percent of manufacturers file as S corporations or other pass-through entities. So when there is discussion to raise individual rates at the end of 2012, that will have a huge and direct and negative impact on manufacturers.

The corporate tax rate is clearly a competitive disadvantage for us right now, but raising individual rates would be a severe competitive disadvantage for us as well.

Representative Mulvaney. Dr. Zandi, do you have the same position?

Dr. Zandi. Yes, in the sense that I also think we need to have comprehensive reform of the personal income tax code as well. And all of these issues need to be considered in a broader context.

Representative Mulvaney. And the reason I asked the question is that it seems up here that we have two debates. We have a debate about corporate tax reform, and then we have a separate debate about individual tax reform. And the message that I am trying to get out, and I am hoping you gentlemen agree with, is that there is an area in between. And it is with the S corporations, that really it is a corporation in terms of what it does, but it gets taxed as an individual.

So what I am hoping that we can do here, Mr. Chairman, is have an understanding that corporate tax reform includes small businesses and S corporations.

Dr. Zandi. Yes. And I think it is important. The way I kind of think about it, cutting across businesses and individuals, is looking at the tax expenditures in the tax code, the credits, and deductions in the code that make it very complex, reduces its efficacy, and just creates bad incentives. And the strategy should be to scale back or eliminate, as best we can, so that we can raise more revenue but also lower marginal rates. And then we accomplish everything that we need to.

Mr. Brill. Congressman, I would just add that the notion of a corporate tax where a small large corporation and a large small corporation face completely different tax systems is completely illogical. The high tax rate for many individuals who are business owners is a distortion. It is a distortion that is taxing and both discouraging the supply of labor as well as the supply of capital.

I would also note, however, that addressing these issues separately, while not ideal, does not disadvantage our smaller businesses. The customers of our small businesses are often large businesses. And so while we should work to both reduce the individual marginal rates to help S corps, partnerships, and sole proprietors, we should—the advantages of a corporate tax reform are good unto themselves.

Mr. Paul. Mr. Mulvaney, I don't want to be the skunk at the garden party here, but I have a slightly different perspective.

Representative Mulvaney. Sure. That's what we're looking for.

Mr. Paul. I do think that we need to look at the effective corporate tax rates among manufacturers. They vary widely. They vary from about zero percent to somewhere in the mid-20s, to in some cases a little higher. I don't think I am burdened by economics training in saying that I do believe that targeted tax assistance can be effective.

For instance, in industries that we are attempting to incubate, you often need public incentives to have those industries thrive. The Clean Energy Manufacturing Tax Credit, which Senator Stabenow mentioned, had a great deal of uptake and really helped to establish battery facilities, wind turbines, solar panels. I think that we should encourage other energy development, too, including nuclear.

But the point is that, for the sake of an elegant economic tax system, we would make a lot of sacrifices. I do think it makes sense to target tax relief for manufacturers that are actually making things in the United States instead of overall income.

And the last thing that I would add, very briefly, is I think it misses the larger debate, which is, virtually every other country we are competing against has a value-added tax system that has rebates for its exporters.

The United States, almost exclusively among industrialized countries, does not have a system like that, and I am not saying that we need to adopt a system precisely like that, but it does put our exporters at somewhat of a competitive disadvantage.

Representative Mulvaney. Mr. Paul, that brings us back full circle to where I started, though, which is that every time you sit and you give the example of a successful government policy on encouraging a particular industry, there are four or five that have failed miserably, and my fear is that we sit here and we are actu-

ally practicing what you've preached. We are giving tremendous incentives to various green energy segments, and my fear is that we are siphoning capital and simply siphoning creativity away from what actually might be working.

We are sitting here today, for example, encouraging wind. My concern is that, by doing so, we are drawing resources away from something that might be more productive than wind energy. So again, that is part of the overall debate.

But I think to your first point regarding the effective tax rate, I think that is exactly what Dr. Zandi was getting at, which is that because of all the loopholes, because of all the incentives, because of all the subsidies in the Tax Code itself, you end up with small companies paying a much higher rate than large companies, and you end up with some industries paying much higher rates than other industries.

And I think what Dr. Zandi and folks like myself have been encouraging is a system that simply does away with that so the effective rate is actually the actual rate at the same time.

Dr. Zandi. Can I just make one quick point?

Representative Mulvaney. At the Chairman's discretion, because I am out of time. So, sorry.

Chairman Casey. Can we make that in—because we want to keep moving.

Dr. Zandi. That's fine.

Chairman Casey. Congressman, thank you very much.

Dr. Zandi. I can speak three days or three minutes.

Chairman Casey. Senator Stabenow—or Senator Klobuchar. We had Senator Stabenow here earlier and——

Senator Klobuchar. I would just end there, if you're trying to explain.

[Laughter.]

You know, you're two women Senators, is that——

Chairman Casey. I have a long introduction of Senator Klobuchar which I will give another day.

[Laughter.]

Senator Klobuchar [continuing]. In any case——

Chairman Casey. You get an extra minute now.

Senator Klobuchar [continuing]. It is good to be here with you, Senator Sherrod Brown—no.

[Laughter.]

All right. I wanted to thank all of the witnesses. I am sorry, we had a hearing in Judiciary on intellectual property, which is also a piece of this, making sure that we are protecting all of the things that we make. But I truly believe the way that we are going to get out of this downturn is by making stuff again, by exporting to the world, by thinking again.

And so all of the focus of this hearing I think is a very good one. It is certainly the way that my State of Minnesota has been able to—while we are not where we want to be, we are now at 6.6 percent unemployment, significantly below the national average.

A lot of that has to do with manufacturing. I suddenly realized this year I could visit some of our factories on the weekends because they were going through the weekends. A lot of it has to do with exports. We have a huge history with Cargill, and 3M, and

Medtronic, and other companies with export markets that has really expanded down into some of our small- and medium-sized businesses, because they think this is the way to go.

And it is just the ag community, as well, which is now doing quite well exporting all over the world from pork to sugar beets to, yes, turkey. We are number one for turkey.

So I wanted to focus here on the work in manufacturing. We exported \$17.2 billion in goods last year, an increase of 17.3 percent over 2009; and a sector recently reported 12-month job gains of 7,800, outpacing the Nation.

So I think I will start with you, Mr. Timmons. I know it is not that rosy all over the place. I am well aware of it. But one of the things I have noticed, I was down at AgCo in Southern Minnesota, in Jackson, employing nearly 1,000 people now, because there's a lot of work in that area going on. They can't find a welder in southern Minnesota right now. And I spend a lot of time at our technical schools: a 96 percent placement rate out of Alexandria Tech. This is no longer your grandpa's tech schools. They are not just fixing cars. They are actually learning how to run computer systems that run the assembly lines at Boise Cascade and other places.

And I would like to see a greater emphasis—Scott Brown and I have a bill called Innovate America—a greater emphasis on these two-year degrees and how our businesses and manufacturing can work with these two-year community and technical colleges to figure out what their needs are, literally within a year, and get kids into those programs, as well as workers who have lost jobs.

Could you comment on the need for workers trained in where there is actually the openings?

Mr. Timmons. That is music to my ears, Senator. And if I could just divert for just a second, Mr. Chairman, you did ask earlier what can be done to help manufacturing. And one of those things is to ensure that all elected officials spend time in a manufacturing facility and see real people in the real world doing real things.

I bring this up because Senator Klobuchar is a perfect example of that. She has visited many of our member manufacturing facilities in Minnesota, and they have a very personal and good relationship with her. So thank you, Senator, for your commitment to manufacturers.

I would say that you are exactly right on. One of the things I hear about from my members around the country, besides the big three that I mentioned already—taxes, energy policy, and regulatory burden—is the lack of a skilled workforce.

There are jobs that are available, and there are companies that are not able to fill those jobs. I mentioned earlier, and I think it bears repeating, we have a partnership with the Administration. The President endorsed the National Association of Manufacturers' skills certification program, which is a national set of standards to help potential manufacturer workers ensure that they have the skills necessary for the jobs of the future and the jobs that are available today.

So I look forward to reading a summary of your legislation, but the issue is right on. And we are working on that from the NAM perspective and a good public-private partnership with the government I think is very helpful in this regard.

Senator Klobuchar. Well thank you. And another piece of this, obviously, that you focused on is exports of manufactured goods. I have some strong views on that, as well. I've headed up the Export Subcommittee of Commerce, but that having our embassies around the world make this their major focus is helping when companies are trying to get either private contracts or government contracts in other countries. But also not closing the door on the small- and medium-sized especially manufacturing firms that need help from the foreign commercial service.

Senator LeMieux and I got tacked on the Small Business bill last time some help in that regard because it is worth its weight in gold. Could you just comment on small- and medium-sized businesses and their need to be part of this growing export market?

Mr. Timmons. Small and medium enterprises are a very fast-growing part of the export platform in this country. And in fact at the NAM we have a loaned executive, if you will, from the Department of Commerce whose sole function is to help reduce barriers for export opportunities around the world for small and medium enterprises. So I agree with you that that is an important part of the puzzle, as well.

Senator Klobuchar. And Dr. Zandi, I appreciate you being here, as well. And I know that you see the export market as key. And just one piece of this is, as we look at that export market, one of the things that becomes clear to me—and Mr. Timmons mentioned this—is we are competing in these markets against companies in other countries that sometimes are newer competitors. They have new rules. They have been able to start fresh.

And I am becoming increasingly concerned with some of our rules and regulations. I just look at medical devices where a lot of the investment is going to Europe now because China is requiring country-of-origin labeling. No one would have even guessed this two decades ago.

So because the European system will say it goes faster, a third of that venture capital money has been going to Europe. Or tourism, because it takes so long to get the visas to come to America versus Great Britain; we have lost 16 percent of the international tourism market since 9/11, not necessarily just because we put the security rules in place but because we haven't adjusted in terms of how we handle those applications.

So I just wondered if you could comment about the economics of changing some of these rules and regulations because we no longer compete in a vacuum.

Dr. Zandi. Yes, you make an excellent point. I think it is clear that going forward the key source of economic growth will be exports; that for the past quarter century we have relied on U.S. consumers to purchase the things that we produce that drove our growth in the global economy, frankly. And that is one of the inflection points, as a result of what we've been through, that going forward we cannot count on that. We have to look to selling what we produce to the rest of the world.

And we sell manufactured goods to the rest of the world now, and those manufacturing companies that survived what we went through I think have to be very competitive. They have to have a

good cost structure, and have a good market niche. So I think we are well poised.

But one thing that clearly would help in their effort to sell to the rest of the world is to be cognizant of these regulatory costs and constraints. And when we think about regulation, there are good reasons for regulation, but we need to think about them through the prism of what they actually mean with respect to export growth. Because, again, at the end of the day that is our key source of growth long run.

Senator Klobuchar. Very good. Thank you very much. I appreciate it.

Chairman Casey. I want to make sure Senator Klobuchar had some extra time after I referred to her as Senator Stabenow.

Senator Klobuchar. I would let it go because no one really noticed it out there.

[Laughter.]

Chairman Casey. We could add more time. This panel is willing to be here all day.

[Laughter.]

I know we have to wrap up. I wanted to pose one more question, and then give each of you a chance, if you wanted, to add something, but it tells you how closely folks up here listen.

Our staff came up with a great question: Based upon part of your testimony, Mr. Zandi, and Mr. Brill part of your testimony, this question is about the impact during this period of recovery that manufacturing jobs have had, that manufacturing as a sector has contributed mightily to the recovery—I guess about half of the growth—but in terms of the job gains, it is about one-tenth? Is that what you said, Dr. Zandi?

Dr. Zandi. That's correct, right. One-tenth. If you include the temp jobs, many of which are in manufacturing, it is at most one-fifth.

Chairman Casey. So juxtaposing that, or putting that along with this point that Mr. Brill made about productivity, there would be pretty substantial productivity gains. The question I have is, how much—when you consider the productivity gains with manufacturing contributing one-tenth of the job gains—what has happened with regard to wages?

It seems that, even though we have had a pretty substantial uptick in productivity, I wonder how much workers have benefitted from that? What can you tell us, if anything, about the wage growth in that, say in the 2009 to 2011 time period?

Mr. Brill. Senator, I can't speak to that specific set of years. What I can tell you, however, is there is some research in this area, including some work by staff at the Bureau of Labor Statistics. The productivity growth in the manufacturing sector has outpaced the wage growth in that sector.

That is true. And is, fairly, legitimately something that policy-makers may be concerned with. It is unclear what the explanation for that trend would be. Congress is certainly familiar and comfortable with the fact that productivity growth and wage growth don't necessarily move hand in hand, certainly not over the short run. However, over the long run there should be a strong correlation between the two.

And over a number of years we have seen a lag in wage growth. I would also note, however, that some of that may be attributable to some labor policy burdens and rising compensation costs, rising health care costs. And so we have observed, for example, a decline in the share of wages as a share of total compensation across our entire economy. Workers are being paid more and more in nondollars. They are being paid in fringe benefits. And that could be a contributing factor, particularly in manufacturing.

Dr. Zandi. I looked at the data in preparation, and average hourly earnings in manufacturing have gone nowhere since the recovery began. There are other measures of wages, but that is the most timely consistent measure that we have.

So they have been flat. Now that, combined with the increase in output, means profits are up. So if you look at profits at manufacturers, they have returned to prerecession levels. So most of the benefit of this improvement in manufacturing has come in the form of jobs, some jobs. It has also come in the form of more hours, right, for those people who are working. But most of the benefit—at least so far—has accrued to businesses.

Now let me say one other thing. That is not atypical in a recovery. That is how it works, generally. You know, a recession hits, businesses panic, they cut costs, they cut labor, they try to get their margins up. They get a little bit of sales growth, and it goes right to the bottom line. And then historically, with that better profits and better stock prices, that gets businesses to go out and expand and hire. They take a risk.

And that is where we are right now. And it is not happening. And that is the problem we have. That is why this recovery is not engaging. It is not only manufacturing; it is across the economy. So this is the crux of the matter.

Why is it that businesses are not acting on their better profitability? Now my sense is that they are going to have to, because you cannot continue to grow earnings, profits, and maintain your stock price by cutting costs. That is done. They have done it. So now they need revenue growth. They need to look for opportunities.

So hopefully we will see it. We just need, I think, a little bit of luck and some really good policymaking to make sure that we nail down this uncertainty, particularly with regard to the deficit, and the debt, and the debt limit. And I think it will come together for us in terms of jobs.

Chairman Casey. Yes, we hear a lot about that uncertainty across the board. I know we are ready to wrap up, unless Senator Klobuchar has any more questions?

Senator Klobuchar. No.

Chairman Casey. Okay. And if our panel has anything you want to say before we wrap up? We are pretty close on time. Anyone, before we—and of course the record will be open not only for individual members to submit questions for you to answer for the record, but of course if you want to submit additional material.

Mr. Paul.

Mr. Paul. Mr. Chairman, just very briefly. Thank you for having this hearing. It is very important. One word about productivity and wages. This has been a long-term trend dating back to the early 1980s, and it has been unique in the post-World War II period.

One possible explanation that needs I think further discussion is the productivity measure itself, and the degree to which intermediate inputs, especially those that are imports, are seeping into the productivity data. It may be skewing it slightly, and some economists at Upjohn Institute as well as Michael Mandel, who used to be the chief economist at Business Week, have identified that. I think that is worth exploring much more greatly.

But I do think that one thing that the recession revealed is that there were some structural impediments to growing manufacturing in this country even after the acute nature of the decline in demand. The skills' infrastructure which Mr. Timmons identified is something that is critical. Rebuilding our logistical infrastructure in this country to move goods is also very important—access to credit.

But I think those were the strong foundations for a manufacturing strategy.

Thank you.

Chairman Casey. That is a good note to end on. We do need a strategy. We do not have one, and one hearing does not a strategy make, but I think we have had a lot of good ideas here.

And I think it is worth repeating, as I said at the outset, that this will be one of several hearings we will have in the Joint Economic Committee to best determine those strategies to revitalize manufacturing and to rebuild this base of our economy.

I do want to thank both panels who are with us today, and especially those who traveled a great distance to be here. And as I said, the record will be open for five business days for any Member to submit a statement or additional questions, and that would apply to the witnesses, as well.

So unless there is anything else to come before us, we are adjourned.

[Whereupon, at 12:08 p.m., Wednesday, June 22, 2011, the hearing was adjourned.]

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF SENATOR DEBBIE STABENOW

Chairman Casey and Vice Chairman Brady, thank you for the invitation to testify at today's hearing on "Why We Need a National Manufacturing Strategy." This is a critical issue for my home state of Michigan and for our country's economic future.

In order to have a strong middle class in America, we must continue to make and grow things in this country.

Michigan led the way in the last century as the heart of American manufacturing, and we are rightfully proud that we helped create the middle class in this country.

But for too long, we've seen a situation where our companies are competing against other countries. Competitors as diverse as Japan, China, India, and Germany all have manufacturing strategies.

Because we have lost our focus, between 1979 and 2009, the U.S. lost more than 8 million manufacturing jobs. Michigan alone lost more than 300,000 manufacturing jobs between 2000 and 2010.

During this time, countries like China have been investing heavily in emerging technologies, including renewable energy. In the next two years alone, China will invest almost \$15 billion in advanced batteries.

Japan paid for almost all of the initial research for Toyota to create batteries for its vehicles. And last year, China invested over \$20 billion in its solar industry.

Unfortunately, part of China's manufacturing strategy is stealing our intellectual property and breaking international trade rules.

We need to hold China accountable and devote additional resources to trade enforcement—which is why I have legislation that would create a Chief Trade Enforcement Officer.

We also must make strategic investments in clean energy technologies. President Obama has challenged us to put one million electric cars on the road by 2015. He realizes that, by investing in electric vehicle innovation, we can create jobs in America.

We know that by supporting American innovation and manufacturing, we can bring jobs back—we know it, because it's working.

In 2009, we put \$2 billion toward advanced batteries. Before we made this investment, the United States made only 2 percent of the world's advanced batteries. By 2015, we will have the capacity to produce 40 percent of those batteries.

Since January 2010, the U.S. has created nearly a quarter million manufacturing jobs—the first increase in over a decade.

These policies were a good start, but they are not enough. We need to invest more and be smarter about how we do it. For example, in the last decade, our production tax credit for wind turbines expired three times. Each time, there was a sharp drop in installations of wind power projects.

While China has five- and ten-year plans, our policies are unpredictable. Congress needs to give our manufacturers greater certainty on whether the incentives we promise will actually be there.

Innovation has always been the reason America has the strongest economy in the world. To compete in the 21st Century, we need a strong, vibrant economy that makes advanced manufacturing a priority.

America needs to lead in all aspects of advanced manufacturing—from automobiles and wind turbines to computer chips and nanotechnology.

Opponents of having a manufacturing strategy will say that manufacturing's time has passed and should be done in developing countries. I disagree. Our workers and businesses are the most productive in the world and can compete, and win, against anyone.

With the right investments, we can create jobs today that will last for years to come.

We're in a race for the future, and I want America to win that race. We must have a strong manufacturing strategy to get there.

Thank you.

PREPARED STATEMENT OF REPRESENTATIVE CHARLES F. BASS

Good morning. Thank you for the opportunity to testify before the Committee today. New Hampshire is an excellent example of a state with a diverse economy and manufacturing sector. We have low unemployment, a high-skilled workforce, and a lower tax rate than most states that contributes to the success of our state's economy. I hope that this New Hampshire perspective, as well as my prior experience in the business world, in which I helped to expand several small businesses in New Hampshire including a company that manufactures architectural products, will be useful.

In New Hampshire, manufacturing makes an important contribution to our state's economy. Whether it is BAE Systems manufacturing advanced products that protect our troops, GT Solar manufacturing photovoltaic systems, Smiths Medical manufacturing medical devices for the hospital, emergency, home and specialist environments, Hitchiner manufacturing complete-to-print, high-volume, complex thin-wall investment castings, or Timken manufacturing anti-friction bearings, these activities are critical to our state's economy and employment.

New Hampshire manufacturers account for over 11 percent of the total output of the state and employ 10.5 percent of the workforce, approximately 31,200 jobs. Furthermore, manufacturing compensation is 67 percent higher than the average annual compensation of other nonfarm jobs in the state. In 2009, total output for manufacturing was \$6.6 billion, with the computer and electronic sector leading with \$1.9 billion.

As in New Hampshire, U.S. manufacturing still remains a success story today. While we need to continue to ensure its global competitiveness, it is not in need of micromanagement from government. We have the most productive manufacturing labor force in the world. Even though manufacturing as a percent of gross domestic product has been steadily falling and payroll employment as a share of total U.S. employment has been declining over the past 60 years, labor productivity has grown to historic highs.

By comparison to other countries, such as China, our closest contender, the productivity of Chinese manufacturing workers is only 12 percent of its American counterpart—meaning that 11 to 12 million U.S. manufacturing workers produce nearly the same amount of product as 100 million Chinese workers, according to the Manufacturers Alliance.

While there has been much legitimate concern about the outsourcing of jobs, the counterbalance of in-sourcing enables foreign direct investments to create wealth, employment and exports for the United States. In fact, according to the National Association of Manufacturers, one in 12 U.S. manufacturing jobs is currently employed by a foreign-owned business and, according to the office of the United States Trade Representative, nearly one-quarter (23.3 percent) of all manufacturing workers in New Hampshire depend on exports for their jobs.

The manufacturing changes we have witnessed over the past several decades have resulted not from an unfair playing field with our trading partners, but from the massive transformation resulting from innovation and technological advancement. This trend in the United States is parallel to the changes we've seen in the global manufacturing industry as well when measured as a percent of global gross domestic product.

The United States is manufacturing more sophisticated goods with hundreds of parts that come from dozens of countries throughout the world. Manufacturing more technologically advanced and innovative goods requires more highly skilled labor, and, according to the Heritage Foundation, there has been a 44 percent increase in the number of workers employed in the U.S. manufacturing sector with an advanced degree.

However, I'm deeply concerned about the current regulatory burden on U.S. businesses, and, considering that manufacturing comprises 57 percent of total U.S. exports, this puts us at a serious disadvantage to competition abroad. According to the National Association of Manufacturers, costs resulting from high corporate taxes, increasing health care and pension costs, federal regulations, and tort litigation have resulted in overall cost increases for U.S. manufacturers of nearly 18 percent over major trading partners.

On the other side of the equation, regulatory costs that taxpayers pay are increasing too. According to a study out of the Washington University's Weidenbaum Center, the federal regulatory budget is expected to grow 4.3 percent this year and 3 percent next year.

As our economy continues to recover from this recession, we must give businesses, including manufacturing, a chance to grow and create jobs without burdensome interference from the federal government. Our guiding principle should be a govern-

ment that spends less on the pathway to sound economic policy, not just for one sector, but for the economy as a whole.

As of 2010, manufacturing contributed to 95 percent of New Hampshire's exports, and from 2003–2010, manufactured goods exports increased 135 percent, which was above the national average of a 70 percent increase. Small businesses, the economic engine of our state, comprise 88 percent of New Hampshire's exporters as of 2009, and account for 42 percent of total state exports.

The majority of people in New Hampshire and across the nation are employed by small businesses, but the excessive government regulations and fees on small businesses discourage expansion and job growth. A study from the Committee on Oversight and Government Reform found that small manufacturers bear a massive regulatory burden of \$26,316 per employee, more than double the burden on large manufacturers.

Yet this is only a fraction of the cost that all small businesses in the private sector pay when it comes to regulatory burden. When considering small businesses at large, the total cost hits \$1.75 trillion, according to the Small Business Administration's most recent estimate, 36 percent more than what large businesses pay. That exceeds the gross domestic product of Canada, is three times New Hampshire's gross state product, and rivals California's gross state product, the largest state economy in the United States.

What is good for the manufacturing industry is good for all businesses in the U.S.. Our trading partners are not gaining ground on U.S. manufacturing because our manufacturing sector is declining; they are gaining ground because our current economic policies are failing U.S. manufacturers and businesses in the U.S.

We cannot use targeted and excessive regulations and policies that actively engage in picking winners and losers in the economy in order to compete globally. If we wish to continue to attract and retain innovative and successful companies, we need to reform many of the federal policies that are hampering U.S. companies.

Thank you and I look forward to your questions.

PREPARED STATEMENT OF VICE CHAIRMAN KEVIN BRADY

I thank Chairman Casey for calling a hearing on this important topic.

The U.S. manufacturing sector has changed dramatically over the last several decades. Manufacturing productivity in America has soared. What took 1,000 workers to produce in 1950 now takes only 184.

U.S. manufacturers produce 65 percent of what our country consumes, down from 80 percent three decades ago.

Many consumer goods that were manufactured here are now imported. In the 1960s, U.S. manufacturers made 98 percent of America's shoes, but today 90 percent of shoes are imported. During the same time, entirely new manufacturing industries have arisen in America—such as in computer chips. Chemical products, food, computers & electronics, fabricated metal products, and machinery are the top five manufactured products in America today.

While technology and productivity have shrunk the American manufacturing workforce over the past 40 years, manufacturing remains an important part of our economy. U.S. manufacturers produce about 12.5 percent of our gross domestic product and employ about 9 percent of our workers—that translates into 12 million manufacturing jobs and nearly seven million related jobs, many of them in small businesses.

By transitioning to higher-value products, America leads the world in manufacturing output and is the world's largest manufacturing economy, producing 21 percent of global manufactured products. China is second at 15 percent and Japan third at 12 percent. However, China is quickly becoming a contender for the top spot.

Manufactured goods account for more than half (57 percent) of what America exports to other countries. We rank third in the world as a manufacturing exporter, following the European Union and China.

Today, as America's economic recovery struggles, regional indicators suggest that manufacturing growth has recently stalled in many parts of the country.

In light of these dramatic changes, the issue at this hearing is whether Congress should adopt an industrial policy for manufacturing under the modest fabric of a national manufacturing strategy. It's a timely question.

My concern is that, while often well intended, an industrial policy can morph into the form of central planning which requires the replacement of the invisible hand of the free market with the visible hand of the government. Driven by understandable but misguided political considerations and buttressed with incomplete data and outdated perceptions, it can result in the undesirable: rent seeking, corporate cronyism, and economic stagnation.

In countries around the world, industrial policy has repeatedly failed. Instead of fostering new products and technologies, old firms in declining industries inevitably capture industry policy to protect themselves at the expense of the consumer and ultimately economic growth.

As President Reagan once observed of government's view of business: If it moves, tax it. If it keeps moving, regulate it. If it stops moving, subsidize it.

President Carter's Chairman of the Council of Economic Advisers Charles Schultze observed:

One does not have to be a cynic to forecast that the surest way to multiply unwarranted subsidies and protectionist measures is to legitimize their existence under the rubric of industrial policy. The likely outcome of an industrial policy that encompassed some elements of both "protecting the losers" and "picking the winners" is that the losers would back the subsidies for the winners in return for the latter's support on issues of trade protection.

As we listen to testimony today from distinguished lawmakers, economists, and business leaders, my thought is that, instead of a Washington-centric industrial manufacturing policy, Congress should instead adopt progrowth economic policies that raise the competitiveness and opportunity for all economic boats in our country:

- 1) To ensure businesses do not bear higher tax costs, Congress should adopt a comprehensive plan to reduce federal spending relative to the size of our economy, reform our entitlement programs to make them sustainably solvent, and gradually bring the federal budget back into balance.
- 2) To increase competitiveness around the globe, Congress should reform our corporate tax system. The United States has the second highest corporate income tax rate in the world. Congress should reduce the after-tax cost of new investment by expensing most equipment and shortening the depreciation schedules for buildings. Congress should move to a territorial tax system. Until then, Congress should act now to allow U.S. corporations

to repatriate stranded American profits to invest in new jobs, research, investment, and financial stability here at home.

3) To find new customers for American manufacturers, farmers, and service companies, Congress should immediately approve the three outstanding free trade agreements with Colombia, Panama, and South Korea and seek more opportunities to open growing markets to American workers.

4) To reduce unit costs and keep American companies located in America, Congress should repeal laws that drive up costs—such as the new national health care law and unnecessary federal regulations. To help erase the estimated 18 percent disadvantage in costs for U.S. manufacturers compared to their global competitors, Congress should act now to modernize our patent system and reform our tort system to reduce the excessive costs of frivolous lawsuits.

I believe adopting these economic policy changes would benefit U.S. manufacturers, their customers, their suppliers, and their workers far more than any national manufacturing strategy.

A final point. Lawmakers and policymakers need better information on trade flows, production networks, and global supply chains that better reflect the manufacturing marketplace of today. For example, traditional trade statistics fail to account for the trade-in-value added among two or more countries. Our Bureau of Labor Statistics can track a job gained or lost in a local pub but can't identify a job gained or lost from trade. We are using eight-track stereo statistics in an IPOD world that do not reflect the activity or changes occurring in this fast-growing global marketplace. Accurate, timely, and real world data is a bipartisan goal we can all work together toward.

I look forward to hearing today's witnesses, and again thank Chairman Casey for holding this important hearing.

Testimony of Mark Zandi
Chief Economist, Moody's Analytics

Before the Joint Economic Committee

"Manufacturing in the USA: Why We Need a National Manufacturing Strategy?"

June 22, 2011

Mr. Chairman and members of the Committee, my name is Mark Zandi, and I am the chief economist of Moody's Analytics, an independent subsidiary of the Moody's Corporation. I became an employee of Moody's nearly six years ago when I sold the economic consulting firm I cofounded. This testimony represents my personal views and not those held or endorsed by Moody's.

The purpose of this testimony is to assess current conditions in the nation's manufacturing base, its contribution to the economic recovery and the economy more broadly, its prospects, and the role policymakers should play in supporting long-term growth in manufacturing activity and jobs.

American manufacturers have struggled for much of the past 40 years, and they were hit exceptionally hard during the Great Recession. Despite these travails, manufacturing has made a strong contribution so far to the current recovery, notwithstanding some significant but temporary disruptions caused by the Japanese catastrophe in March. Manufacturing's prospects are also bright given its much improved international competitiveness and what should be strong demand from fast growing overseas markets for U.S.-produced goods. With some deft policymaking, manufacturing will be an important driver of this nation's long-term economic growth.

Economic backdrop

Two years into recovery, the U.S. economy has made significant strides since the dark days of the Great Recession.ⁱ Real GDP and corporate profits are above their prerecession peaks, the private sector has created over 2 million jobs, and the unemployment rate has fallen by a percentage point. Businesses and households have come a long way, reducing debt and getting their financial houses in order. The banking system has recapitalized and is profitable.

An important part of ending the recession and jump-starting the recovery has been the government's monetary and fiscal policy response. This includes a wide range of efforts, including the Federal Reserve's zero-interest rate policy and quantitative easing, several rounds of fiscal stimulus, the TARP-funded support to the financial system, auto industry and housing, and a plethora of regulatory efforts to shore up the financial system. Without these aggressive steps, the economic downturn would have been measurably more severe and the cost to taxpayers much greater.ⁱⁱ

Despite its progress, the economy has a long way to go before returning to anything considered normal. Even with recent job gains, nationwide employment is 7 million below its prerecession peak, unemployment is hovering close to 9%, and while they are no longer aggressively laying off workers, businesses remain very reluctant to hire. Households are also much less wealthy than they were, as stock prices have yet to fully recover the losses suffered during the recession, and house prices continue to decline.

The recovery is also very halting, as is evident from the economy's recent disappointing performance. Real GDP growth during the first half of 2011 is set to come in close to 2%, meaningfully below the economy's estimated potential—that rate of growth necessary to generate enough jobs to maintain a stable unemployment rate. Indeed, job growth has moderated this spring and unemployment has stopped declining.

The shortfall in growth is due most significantly to a surprising surge in oil and food prices. Gasoline prices jumped from around \$2.75 per gallon for regular unleaded late last year to nearly \$4 per gallon in early May. Every 1-cent increase in the cost of a gallon of gasoline costs U.S. consumers about \$1.25 billion over a year. Even though gasoline has since retreated to around \$3.75 per gallon, consumers will likely spend an additional \$100 billion or more this year than they spent in 2010 to fill their tanks. Add in higher grocery costs, and consumers have effectively used up the temporary payroll-tax break they received as part of last year's tax-cut deal to fuel their autos and put food on their tables. Without the payroll tax cut, growth would have essentially ceased this spring.

Fallout from the Japanese earthquake and tsunami has also been more serious than first thought when the disaster struck in mid-March. U.S. vehicle production in particular was significantly disrupted by a cutoff of essential parts and materials from closed Japanese factories. Considering all ancillary impacts, the incident likely will subtract almost a percentage point from real U.S. GDP growth in the current quarter. This is significant given the importance of vehicle production and manufacturing more broadly in the current recovery.

Surging oil and food prices and the Japanese quake do not explain the slowdown completely, however. Amplifying their economic consequences is an extraordinary edginess among consumers, businesses and investors. Prices are highly visible for gasoline, a commodity nearly everyone relies on; few things unsettle confidence like watching those prices rise. Even more disconcerting, the price run-up stems from Middle East unrest and strong demand from emerging economies such as China—things beyond U.S. control, at least in the near term.

Skittishness is evident in businesses' desire to hoard cash. With profit margins about as wide as they have ever been, many firms, particularly large and midsize ones, are effectively minting money. Companies are investing more, raising dividend payouts and stock repurchases and boosting mergers and acquisitions—still the cash piles up. The quick ratio for nonfinancial corporate businesses—liquid assets as a share of short-term liabilities—is at a post-World War II high. Yet firms cannot seem to shake the fear that they will be caught short if they take a chance and deploy their cash reserves more aggressively.

Investors also appear to have lost some faith. Stock prices are off about 6% from their late April high; while this is less than half the drop that followed the outbreak of Europe's debt crisis in spring 2010, it still equals about \$1 trillion in lost wealth. While the economy and the stock market can each affect the other, the causal chain seems currently to be running mainly from stock prices to consumer spending. Judging by sales at high-end retailers, high-net worth households are especially sensitive to the value of their equity holdings.

Further blows to sentiment could ignite a negative feedback loop, undermining growth and raising the specter of a new recession. While such a scenario cannot be dismissed, it is more likely that confidence will remain sturdy enough for the impediments to growth to fade and for the economy to reaccelerate. Indeed, the Japanese economy is already rebounding and oil prices have probably peaked: While the Middle East remains unsettled and little Libyan production is likely soon, the Middle East's other oil fields and pipelines are operating, and Saudi Arabia has promised to make up any shortfall in output. Growth in oil demand is also moderating as high prices curb consumption in the developed world and policymakers move to slow overheating in emerging economies.

A revival in economic growth also depends on a timely resolution of Washington's debt-ceiling debate. It is hard to believe that Congress will not act to raise the debt ceiling over the next few weeks. A failure to do so would—at the very least—force budget cuts severe enough to push the economy into recession. Financial markets are calm now because investors do not believe policymakers will go down this path; turmoil will erupt quickly if lawmakers actually do. The result would be another "TARP moment," as in 2008 when Congress initially voted down the Bush administration's request for a \$700 billion bank bailout fund. Congress reversed itself a few days later as stock prices cratered. Despite the quick about-face, the TARP votes created serious economic damage, and similar damage can be expected this summer if political brinkmanship over the debt ceiling continues much longer. Assuming it ends soon, however, the debt-ceiling debate could produce something positive: namely, agreement on a future deficit-reduction goal and a budget mechanism to achieve it.

Manufacturing's troubled past

Another key to the recovery and the economy's long-term performance is a strong and sustained revival in the nation's manufacturing base. Aside from housing, manufacturing suffered more during the Great Recession than any other sector of the economy. The statistics from the recession are grim: Industrial production fell more than 20% during the downturn, the sharpest drop since the defense build-down after World War II and more than twice the average decline in production during past recessions (see Table 1). The fall in activity was broad-based, with more than three-quarters of manufacturing industries suffering consistent declines in production and employment.

Table 1: Significant Manufacturing Downturns Since World War II
% peak-to-trough decline in industrial production

Sources: Federal Reserve Board, Moody's Analytics

| | |
|--------------------------------|--------------|
| December 2007-June 2009 | -20.4 |
| December 1973-May 1975 | -15.5 |
| February 1957-April 1958 | -13.6 |
| March 1979-December 1982 | -11.5 |
| July 1953-April 1954 | -9.5 |
| January 1960-February 1961 | -8.6 |
| October 1948-July 1949 | -8.1 |
| October 1969-November 1970 | -7.0 |
| June 2000-November 2001 | -6.6 |
| September 1990-March 1991 | -4.7 |

Based on total industrial production before 1972, manufacturing industrial production thereafter.

The unprecedented decline in manufacturing during the Great Recession had a number of causes, most notably the crises in the vehicle and housing industries, a deep worldwide recession and draconian investment cuts by U.S. businesses in technology and other equipment.

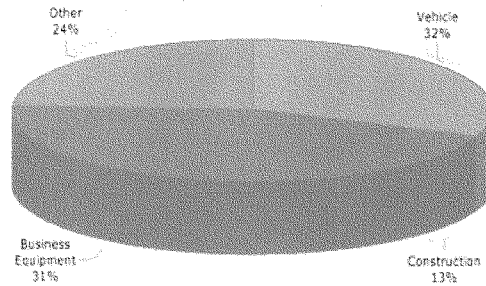
Nearly one-third of the decline in real manufacturing gross output during this recession was in the vehicle industry (see Chart 1). Vehicle production fell by two-thirds, amid a plunge in demand and the near bankruptcies of General Motors and Chrysler. Parts suppliers were also hit extraordinarily hard. Vehicle production has one of the largest economic multipliers of any industry; for every lost job in vehicle assembly, about nine more jobs are lost elsewhere in manufacturing and the rest of the economy.

Problems in the vehicle industry and the fallout on the broader economy of the GM and Chrysler bankruptcies would have been measurably more severe if not for the help of the federal government. If the two automakers had not received federal financial aid beginning in December 2008, their bankruptcies would have resulted in liquidations, causing a very serious disruption to the already-reeling financial system and economy. Even with the government's help, the vehicle industry suffered mightily, as did the economy.

More than a tenth of the decline in real manufacturing output in this recession occurred in production related to construction. The decline in homebuilding and home sales during the more than five-year housing bust badly hurt industries ranging from lumber and wood products to fabricated metals to furniture and appliances. Housing starts are now near their lowest levels since WWII.

The deep global recession was also a significant problem for U.S. manufacturers. More than a third of U.S. manufacturing output is shipped overseas. With nearly the entire global economy suffering a severe downturn, exports declined sharply. Approximately a fourth of the decline in real manufacturing output during the downturn was due to lower exports.

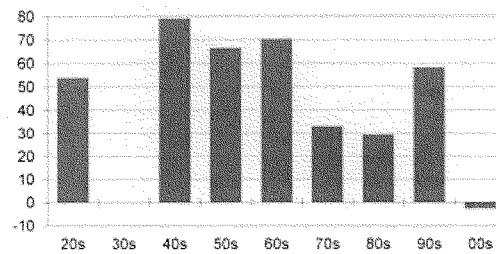
Chart 1: Behind the Collapse in Manufacturing
Share of real gross output decline during the Great Recession



Much of the rest of the decline in manufacturing output during the downturn was due to the sharp pull-back in technology and equipment investment by U.S. businesses. Nearly every business in every corner of the nation struggled during the downturn. For many, draconian cost-cutting was necessary to survive. Real investment in equipment and software thus fell more than 20%, to a level last seen after the technology bust in the early 2000s.

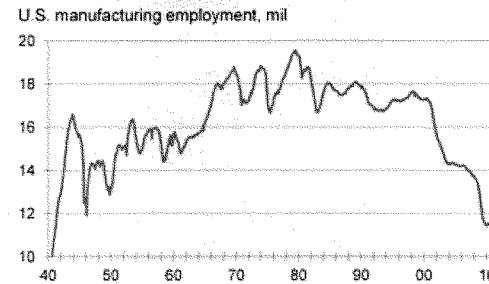
It is important to note that manufacturing struggled long before the Great Recession. Industrial production actually fell over the decade of the 2000s, recording the worst 10-year performance on record. Even during the Depression-wracked 1930s, U.S. industrial production was able to eke out a small gain (see Chart 2).

Chart 2: Manufacturing's Lost Decade
Change in industrial production, %



Sources: Federal Reserve Board, Moody's Analytics

The slide in manufacturing employment was even more severe, with 5 million manufacturing jobs lost during the 2000s (see Chart 3). Even during the debilitating recessions of the early 1980s, the decline in manufacturing employment was less than half that. After the loss of these jobs, fewer than 12 million workers are now employed in manufacturing, the lowest number since just before World War II. Manufacturing now accounts for less than 10% of total payroll employment, compared with more than a third of the workforce just after World War II.

Chart 3: Manufacturing Jobs Evaporate

Sources: BLS, Moody's Analytics

Manufacturing's role in the business cycle

Manufacturing plays an outsize role in shaping the U.S. business cycle. Manufacturing activity declines sharply in recessions and rebounds strongly in recoveries. Considering business cycles since World War II, over half the decline in GDP during recessions is due to falling manufacturing production. In several recessions, the decline in manufacturing was even greater than the decline in real GDP, as growth in other sectors offset some of the drag from manufacturing. Manufacturing is also vital to powering the U.S. economy out of recession into recovery. In the first two years of recoveries since World War II, manufacturing has been responsible for nearly 40% of the growth in GDP.ⁱⁱⁱ

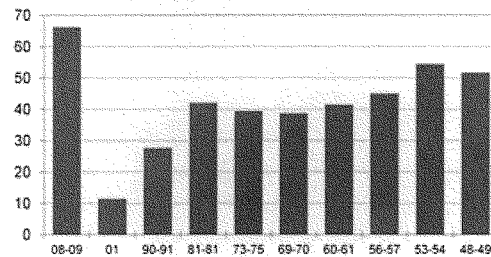
Manufacturing's large role in the ups and downs of the business cycle is due to the impact of large inventory swings and a high sensitivity to interest rates in many manufacturing industries. Most recessions are preceded by a buildup of inventory as confident manufacturers, wholesalers and retailers anticipate continued vigorous sales. When those sales do not materialize, they work hard to cut inventories, reducing production and employment. In recessions, the inventory drawdown and resulting hit to production are often very large. These inventory cycles were larger before new inventory management techniques and technologies became available, but they are still instrumental in influencing the business cycle. Recessions are also preceded by rising interest rates, which weigh heavily on the demand for manufactured goods, which are often financed. After interest rates decline in response to recessions, demand and thus manufacturing output increase early in a recovery.

Manufacturing's contribution to the current recovery has been especially important, accounting for about two-thirds of nominal GDP growth since the end of the Great Recession (see Chart 4). Much of the improvement is due to a rebound in vehicles and related manufacturing. Abstracting from the recent Japan-related disruptions to the vehicles industry, production is about three-fourths of what it was just prior to the recession. Moreover, the multipliers that worked to severely depress activity when manufacturing output was falling during the recession are now fueling much stronger growth. Manufacturing is also receiving an important lift from strong turnarounds in business investment and exports, which are increasing at double-digit rates. The only significant drag on manufacturing remains depressed construction activity.

Manufacturing's contribution to employment gains in this recovery has also been important, albeit not nearly as large as its contribution to GDP. Of the 1.8 million total jobs created since job growth resumed in early 2010, nearly a quarter million are in manufacturing. Many of the quarter million temporary help jobs created during this period are also in factories. Since manufacturing jobs pay more than average for the economy as a whole, their increase has provided a significant boost to incomes. Almost a fifth of the gain in total wages and salaries during this recovery comes from manufacturing.

Chart 4: Manufacturing Contribution to Recovery

Manufacturing's share of GDP growth, 7 qtrs into recovery

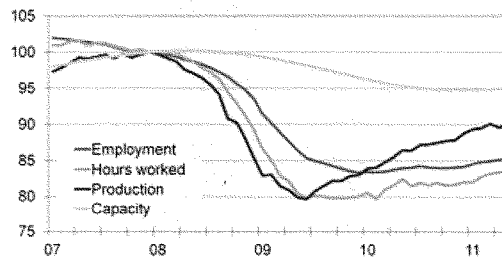


Sources: BEA, Moody's Analytics

Despite these impressive gains, manufacturing activity has yet to return to prerecession levels. Industrial production has recovered about half of what it lost during the downturn (see Chart 5). Production is measurably higher in information-processing equipment, defense and energy-related materials, but it still lags in textiles and apparel, furniture and appliances, and construction-related materials. Despite the gains in factory employment and hours worked, output in these industries remains more than 15% below its levels just prior to the recession. Even manufacturing capacity is down 5% from its peak; the only other time factory capacity has contracted since World War II was briefly just after the tech bust.^{iv} The only gauge of manufacturing's health that has returned nearly to prerecession levels is the profits of manufacturers.

Chart 5: Climbing Out of a Deep Hole

Manufacturing activity, Dec 2007=100



Sources: Federal Reserve, BLS, Moody's Analytics

Manufacturing's broader economic contribution

Manufacturing's importance to the broader economy goes beyond its share of GDP and employment. It goes without saying that some goods production is vital to national defense. The nation must maintain its ability to meet the needs of a military that operates in all corners of the globe. Relying on other nations to produce the goods necessary to arm and maintain the U.S. military would be a mistake.

Manufacturing is especially important as a source of jobs that can support middle-income households. The average manufacturing wage was just over \$58,000 last year, compared with \$49,000 for the typical nonfarm job (see Table 2). For context, the highest-paying industry is mining, at \$90,000 a year, and the

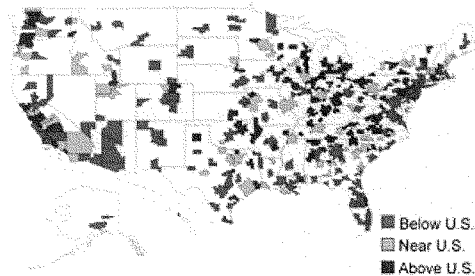
lowest is leisure and hospitality at \$22,000. While pay scales in manufacturing have been coming down relative to other industries, they still remain among the most attractive.

| Table 2: Wages and Salaries Per Employee | |
|---|--------------|
| \$ ths, 2010 | |
| <i>Sources: BEA, Moody's Analytics</i> | |
| Mining | 89.57 |
| Information Services | 76.93 |
| Financial Services | 73.40 |
| Wholesale Trade | 65.28 |
| Professional and Business Services | 61.89 |
| Manufacturing | 58.43 |
| Government | 52.79 |
| Transportation & Wholesaling | 52.06 |
| Construction | 51.77 |
| Nonfarm | 49.29 |
| Health Services | 44.96 |
| Educational Services | 37.93 |
| Retail Trade | 27.99 |
| Leisure and Hospitality | 21.96 |

Manufacturing is also vital to many smaller metropolitan areas and rural communities across the nation where a local factory may be among the largest employers. Manufacturing is particularly important in the Midwest and parts of the South. (see Table 3 and Chart 6). These areas suffered mightily during the Great Recession when manufacturing was in free fall, but they are enjoying solid recoveries with the revival in activity. Some of the strongest job recoveries in the country have been seen in manufacturing centers from central Pennsylvania through Ohio and Indiana to Iowa and Wisconsin. Despite these gains, the cumulative loss of jobs has been massive, and unemployment will likely remain high in these areas for years.

Chart 6: Where Manufacturing Is Most Important

Manufacturing share of total employment, 2010, U.S. = 8.8%



Manufacturing is also essential to research and development, innovation, and ultimately to productivity and living standards. Manufacturing has long experienced the most rapid productivity growth of any sector of the economy. Over the past decade, for example, labor productivity in manufacturing has risen close to 3% per year, compared with nearer 2% in the rest of the nonfarm business sector. Many processes and technological innovations developed and honed by manufacturers ultimately find their way into the rest of the economy.

Table 3: Manufacturing Share of Economic Activity

Sources: BEA, BLS, Moody's Analytics

| | Gross Product Share | | Employment | | Employment Growth Since Job Growth Resumed | |
|----------------------|---------------------|------|------------|------|--|------|
| | 2010 | Rank | 2010 | Rank | % Change, Feb 2010-April 2011 | Rank |
| United States | 11.77 | | 8.88 | | 2.02 | |
| Alabama | 16.27 | 10 | 12.63 | 5 | -0.31 | 41 |
| Alaska | 3.70 | 49 | 3.91 | 45 | -3.15 | 48 |
| Arizona | 9.10 | 35 | 6.22 | 39 | 1.62 | 27 |
| Arkansas | 14.03 | 14 | 13.76 | 3 | 0.19 | 39 |
| California | 12.48 | 22 | 8.94 | 27 | 0.81 | 37 |
| Colorado | 7.37 | 41 | 5.64 | 41 | 1.76 | 26 |
| Connecticut | 10.25 | 32 | 10.33 | 17 | 1.21 | 32 |
| Delaware | 6.48 | 43 | 6.31 | 38 | 0.38 | 38 |
| District of Columbia | 0.22 | 51 | 0.18 | 51 | -7.69 | 51 |
| Florida | 5.36 | 46 | 4.27 | 44 | -0.19 | 40 |
| Georgia | 10.62 | 30 | 9.01 | 26 | 1.22 | 31 |
| Hawaii | 1.92 | 50 | 2.20 | 50 | -5.09 | 49 |
| Idaho | 13.12 | 19 | 8.78 | 29 | 2.07 | 22 |
| Illinois | 12.50 | 21 | 9.96 | 20 | 3.34 | 15 |
| Indiana | 26.81 | 2 | 15.97 | 1 | 3.30 | 16 |
| Iowa | 17.01 | 7 | 13.62 | 4 | 3.52 | 12 |
| Kansas | 13.15 | 18 | 12.06 | 9 | 1.25 | 30 |
| Kentucky | 16.93 | 8 | 11.81 | 10 | 4.47 | 5 |
| Louisiana | 16.70 | 9 | 7.30 | 34 | 4.36 | 6 |
| Maine | 11.09 | 29 | 8.58 | 30 | 1.76 | 25 |
| Maryland | 6.30 | 44 | 4.56 | 43 | -1.40 | 43 |
| Massachusetts | 10.40 | 31 | 7.98 | 32 | 1.03 | 34 |
| Michigan | 17.01 | 6 | 12.27 | 8 | 7.00 | 2 |
| Minnesota | 13.55 | 15 | 11.07 | 14 | 2.60 | 19 |
| Mississippi | 17.19 | 5 | 12.46 | 6 | -2.19 | 44 |
| Missouri | 12.08 | 25 | 9.16 | 24 | 3.39 | 14 |
| Montana | 5.12 | 47 | 3.84 | 46 | -2.99 | 46 |
| Nebraska | 11.76 | 26 | 9.74 | 21 | 3.84 | 10 |
| Nevada | 4.13 | 48 | 3.39 | 48 | -6.77 | 50 |
| New Hampshire | 13.41 | 16 | 10.55 | 15 | 1.84 | 23 |
| New Jersey | 7.62 | 40 | 6.68 | 35 | -2.71 | 45 |
| New Mexico | 9.13 | 34 | 3.62 | 47 | -3.10 | 47 |
| New York | 5.70 | 45 | 5.34 | 42 | -0.85 | 42 |
| North Carolina | 19.00 | 3 | 11.17 | 13 | 1.16 | 33 |
| North Dakota | 7.70 | 39 | 6.03 | 40 | 4.00 | 8 |
| Ohio | 16.22 | 11 | 12.32 | 7 | 3.07 | 17 |
| Oklahoma | 11.33 | 28 | 8.06 | 31 | 9.66 | 1 |
| Oregon | 28.48 | 1 | 10.24 | 18 | 3.01 | 18 |
| Pennsylvania | 12.15 | 24 | 9.99 | 19 | 2.57 | 20 |
| Rhode Island | 7.92 | 38 | 8.79 | 28 | 1.49 | 28 |
| South Carolina | 15.62 | 12 | 11.50 | 11 | 3.54 | 11 |
| South Dakota | 8.85 | 36 | 9.16 | 25 | 5.51 | 3 |
| Tennessee | 15.44 | 13 | 11.40 | 12 | 1.28 | 29 |
| Texas | 13.16 | 17 | 7.84 | 33 | 1.81 | 24 |
| Utah | 12.80 | 20 | 9.41 | 22 | 4.17 | 7 |
| Vermont | 12.17 | 23 | 10.36 | 16 | 3.95 | 9 |
| Virginia | 8.51 | 37 | 6.36 | 37 | 0.91 | 36 |
| Washington | 11.67 | 27 | 9.28 | 23 | 2.35 | 21 |
| West Virginia | 10.01 | 33 | 6.58 | 36 | 1.02 | 35 |
| Wisconsin | 18.52 | 4 | 15.75 | 2 | 5.23 | 4 |
| Wyoming | 7.29 | 42 | 3.07 | 49 | 3.49 | 13 |

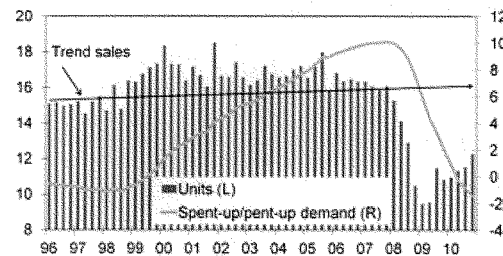
Moreover, productivity gains in many service businesses and in government are driven by sophisticated manufacturing equipment. Losing this type of manufacturing could diminish the ability to generate strong productivity gains in the rest of the economy, even if such equipment can be purchased overseas. Significant economies are generated by having manufacturers located near one another and near nonmanufacturing activities.

Manufacturing's prospects

For the first time in nearly 40 years, it is fair to say that manufacturing's prospects are bright. In the near term, vehicle-related manufacturing will continue to rebound. Vehicle sales are up strongly from their recession lows, but they remain well below levels consistent with a well-functioning economy. In an economy operating and growing at potential, vehicle sales should be running near 15.5 million units annually, compared with the current pace of 13 million units (see Chart 7).⁹ Actual sales have been consistently below this trend sales pace for three years, resulting in pent-up demand. Households are putting off vehicle purchases they would have typically made in times past. Vehicle sales and production are thus expected to steadily rise back to trend, and then to exceed that pace while the pent-up demand is worked off. This will provide substantial support to manufacturing during the next two to three years.

Chart 7: Pent-Up Demand Developing for Autos

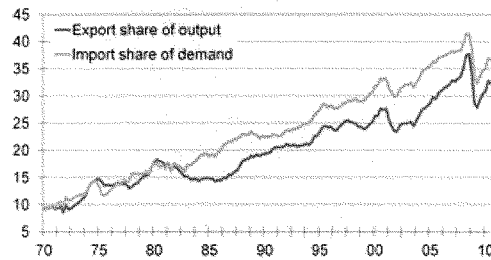
Light vehicle sales, mil



Sources: BEA, Moody's Analytics

Manufacturing will also receive a sizable boost from an eventual revival in construction. Rampant overbuilding during the housing bubble led to a collapse in construction during the recession that has lasted through the recovery so far. Total private construction, including housing and commercial building, is as low as it has been as a share of GDP going at least back to World War II.¹⁰ While it will take some time to absorb all the excess vacant homes and commercial space currently on the market, this process is well under way. Vacancy rates are falling quickly. Construction is expected to pick up in earnest beginning next year and grow through the middle of the decade, lifting manufacturing along with it.

The biggest reason to be optimistic about U.S. manufacturing's prospects is its heightened level of global competitiveness. The fortunes of U.S. manufacturers, and of the entire economy for that matter, are increasingly dependent on the ability to compete effectively against foreign producers. Well over a third of U.S. manufacturing output is sold overseas, yet an even larger share of U.S. demand for manufactured goods is met by imports (see Chart 8). Global competition was very hard on U.S. manufacturers over the past 40 years, and the trade deficit in manufactured goods grew steadily. The last time manufacturing exports and imports were balanced was in the 1970s, when trade accounted for only a tenth of manufacturing output and demand.

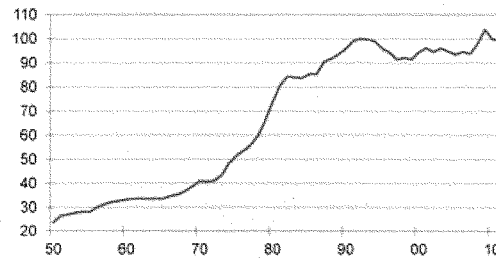
Chart 8: Manufacturing Depending More on Trade

Sources: BEA, Moody's Analytics

This will change as U.S. manufacturers work to become more competitive. Any U.S. manufacturer that survived the Great Recession must be doing something right, staying very cost effective and/or holding a global market niche. Indicative of this is the ability of U.S. manufacturers to keep unit labor costs—labor compensation per unit of output—essentially unchanged since the early 1990s (see Chart 9). Compensation has increased, but productivity growth has kept pace with compensation gains, in sharp contrast with the nearly threefold surge in labor costs during the 1970s and 1980s. Reinforcing U.S. competitiveness are quickly rising labor costs in much of the rest of the world, including fiercely competitive emerging markets such as China.

Chart 9: Growing More Cost-Competitive

Manufacturing unit labor costs, 2010=100



Sources: Bureau of Labor Statistics, Moody's Analytics

Optimism about U.S. manufacturing competitiveness becomes even more compelling when considering the steady decline in the value of the U.S. dollar against most other currencies. On a broad, trade-weighted basis the dollar has fallen approximately 25% over the past decade, and it will likely continue to decline slowly against emerging-market currencies. Global manufacturers are increasingly looking to locate and expand in the U.S., particularly those with investment horizons that extend through the current decade. A weaker U.S. dollar puts upward price pressure on the commodities and materials that many U.S. producers import, but the benefits of an orderly and modest decline in the dollar against emerging-economy currencies far outweighs this negative.

U.S. manufacturers will also benefit increasingly from rapid economic development in emerging economies. Not only do these nations require large amounts of capital goods and manufactured material to

fuel their development, but they are increasingly interested in purchasing the more sophisticated manufactured goods produced in the U.S. These include high-tech machinery and electronics, aircraft, satellites and other telecommunications equipment, sophisticated materials, pharmaceuticals, and processed foods, among other items.

While it will take many years for the U.S. trade deficit in manufactured goods to disappear, the process is under way in earnest. U.S. manufacturers who have long seen the dark side of global trade are moving toward the bright side, where they will be long into the future.

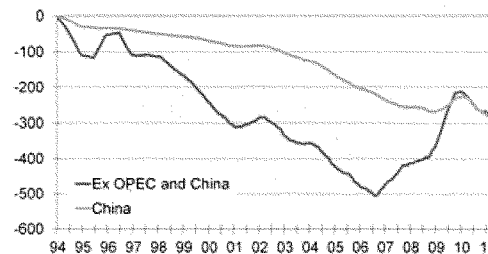
Policy don'ts

There are number of things policymakers should and should not do to support growth in the nation's manufacturing base. The most obvious thing policymakers should not do is erect trade barriers to limit trade in manufactured goods. This would be very counterproductive. To date, despite the very difficult economy, global policymakers have done an admirable job of keeping protectionist sentiments at bay. Efforts to further liberalize global trade and investment have stalled, but they have not backtracked to any significant degree. Yet with persistently high unemployment, particularly in developed economies, these sentiments could well boil over. U.S. policymakers must resolve not to allow this to occur.

Policymakers should work to reduce barriers to free trade erected by other nations. Arguably most critical is China's policy of undervaluing its currency. Given the large and growing trade imbalance with China, U.S. policymakers should continue to pressure their Chinese counterparts to further revalue the yuan (see Chart 10). China's currency has appreciated by 20% since the revaluation process began five years ago, but it remains approximately 25% undervalued against the dollar.^{vi} This gives Chinese manufacturers an unfair competitive advantage in global markets. A reasonable expectation would be for China to allow its currency to rise no less than 5% per year over the next five years. This would allow a smooth transition for their manufacturers and provide steady relief to U.S. manufacturers.

Chart 10: China's Currency Is Undervalued

U.S. trade deficit, \$ bil, 12-mo moving sum



Sources: Census Bureau, Moody's Analytics

Industrial policies directed at specific industries or companies have not been particularly successful in supporting manufacturing activity. To be sure, the U.S. does not have extensive experience with such policies, but what experience we do have and what we have learned from other developed economies suggests that targeted industrial policies are not very effective.

Various states have used what might be labeled industrial policy to entice specific companies to locate and expand within their borders. These incentives include tax breaks, infrastructure improvements and regulatory easing. The most successful efforts have attracted foreign vehicle manufacturers to the southern U.S. While such policies may make some sense in small states that lack significant economic diversity,

they are less compelling in more complex state economies and at the national level.

Policy dos

A much more effective way to support manufacturers would be to lower their business costs, including labor, capital, and transportation and telecommunication.

Manufacturers appear especially nervous about their ability to fill job openings that are becoming available as skilled workers among the large baby-boom cohort retire. Many of the most skilled U.S. workers are aging, and it is difficult to fill their spots. This skill shortage threatens to become a key constraint on growth for many manufacturing businesses.

To address this problem, policymakers should invest in technical schools and community colleges. Technical schools and community colleges provide significant value, particularly in hard-pressed communities whose residents lack the financial resources to attend private four-year colleges or even state-funded universities. These schools can also alleviate a growing problem for many manufacturers, namely the lack of a qualified workforce. Large multinational manufacturers seem increasingly willing to partner with these schools: The firms help pay teachers' salaries and build offices or other facilities, in exchange for a say over the schools' curriculum. Policymakers should look to aid these efforts with additional funding to schools that attract manufacturing partners.

Manufacturers would also benefit from reform of the unemployment insurance system, including the expansion of work-share programs. Work-share allows manufacturers to avoid some layoffs by cutting workers' hours, with government making up some of the employees' lost compensation. This allows businesses to avoid severance costs and keep valuable employees whose skills are difficult to replace. Workers are increasingly willing to give up some hours to avoid being laid off. The unemployment insurance program should also provide incentives to unemployed workers to invest in their own retraining. Federal efforts to facilitate the retraining and education of displaced workers have been inadequate, and there has been little research into the design and implementation of effective retraining programs. This is especially important for unemployed workers in distressed regions of the country.

Corporate tax reform that includes broadening the base and lowering marginal rates would boost the global competitiveness of U.S. manufacturers. The corporate tax code has grown into a complex patchwork of inefficient and arguably unfair provisions, encouraging businesses to spend significant resources solely to reduce their tax exposure. Policymakers should also consider moving from a worldwide to a territorial corporate tax system. The worldwide system is out of step with taxation in much of the rest of the world and encourages U.S. corporations to hold significant earnings overseas for long periods.

To lower the cost of capital for small manufacturers, policymakers should work to expand lending by the Small Business Administration. SBA lending has been encumbered in today's tight credit environment, as depository institutions that implement the lending programs remain cautious about extending credit. Their reluctance continues despite changes in SBA programs to prompt more lending. It may even be worthwhile to empower the SBA to experiment with indirectly providing equity capital to new businesses. A dearth of equity capital appears to be a significant impediment to business formation, particularly in manufacturing.

To lower the cost of transportation, telecommunications and energy, policymakers could provide consistent support to public investment in transportation networks, the internet backbone, and the electric grid. As a potential example of this support, Build America bonds issued as part of the recent fiscal stimulus efforts have been very successful. A national infrastructure bank, which could marry private capital with financial support from the government, would provide a substantial boost to this effort.

Conclusions

The nation's manufacturers have suffered mightily in recent decades. The Great Recession was especially debilitating. Yet manufacturing is making a comeback. Manufacturers who survived that severe

downturn are highly competitive and poised to grow, particularly as global trade turns from a gale-force headwind to a steady tailwind. The success of manufacturers is vital to our broader economic success. Manufacturing is key to the economic well-being of many communities across the country, and to the innovation and technological progress necessary to power the economy's long-term growth. Policymakers should not target specific industries and companies for help from the federal government, but should carefully consider manufacturing's monumental difficulties, its importance in our economy, and its promise when designing and implementing economic policy.

ⁱ The business cycle dating committee of the National Bureau of Economic Research dates the Great Recession from December 2007 to June 2009.

ⁱⁱ See "How the Great Recession Was Brought to an End," Alan Blinder and Mark Zandi, July 27, 2010. <http://www.economy.com/mark-zandi/documents/End-of-Great-Recession.pdf>

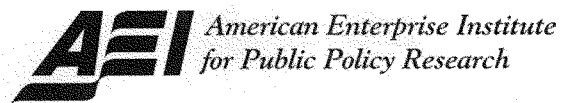
ⁱⁱⁱ More precisely, this is based on the average share of nominal GDP growth accounted for by nominal output growth in goods-producing industries seven quarters after business-cycle troughs since World War II.

^{iv} Despite the shuttering of factories, manufacturing capacity utilization is still only 76%; a level above 80% is needed to be consistent with a well-functioning manufacturing base.

^v This is based on an econometric model of vehicle sales that accounts for demographic, income, wealth and auto lending, and leasing trends. It also assumes real gasoline prices will average \$3.50 for a gallon of regular unleaded over the next four years. The current sales pace of 13 million units abstracts from the Japanese quake impacts.

^{vi} Residential and nonresidential investment in structures declined to a record low 4.7% of GDP in the first quarter of 2011. The previous low was 6.5% during the early 1990s recession; the average share since World War II is 8.3%.

^{vii} This is based on an econometric equation of bilateral trade between China and the U.S. To stabilize the China-U.S. trade deficit in the next five years, the nominal dollar/yuan exchange rate must rise about 25% over this period.



Statement before the U.S. Congress Joint Economic Committee
Hearing on the State of U.S. Manufacturing

Alex M. Brill
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American Enterprise Institute

June 22, 2011

The views expressed in this testimony are those of the author alone and do not necessarily represent those of the American Enterprise Institute.

Chairman Casey, Vice Chairman Brady, and other members of the Committee, thank you for the opportunity to appear before you this morning and discuss the U.S. manufacturing sector—a key part of our economy. The significance of manufacturing to the U.S. economy is undeniable, and the role and dynamics of this sector are important to study. It is critical to recognize, however, that manufacturing is but one segment of the U.S. economy, and the share of the resources dedicated to this sector should be determined by market forces, not government policy.

The role of policymakers should be to establish broad, effective, and stable policies that permit the U.S. economy to evolve as market forces dictate. Given that objective, policymakers should not seek to develop targeted subsidies or narrowly tailored economic policies for a single sector, not for one as large and important as manufacturing or for other smaller sectors. Instead, policymakers should promote economic growth by improving the U.S. business environment as a whole. Pursuing structural reforms will benefit the manufacturing sector directly by reducing costs and impediments and indirectly by encouraging growth across the entire economy.

There are many ways policymakers can pursue the goal of facilitating a healthy business environment for manufacturing and other sectors. Trade liberalization, corporate tax reform, education and job training, legal reforms, a comprehensive energy policy, and other infrastructure improvements are but a few. In my testimony this morning, I will focus on just one—corporate tax reform. However, it is important for the purposes of this hearing to understand the evolution of the manufacturing industry. Therefore, I will begin with an overview of the current state of manufacturing in the U.S. and the longer-term employment and productivity trends in the sector.

Recent Trends in the U.S. Manufacturing Sector

The U.S. manufacturing sector produced about 11 percent of total output and employed about 8 percent of the total workforce in 2009.¹ Manufacturing industries have been a significant driver of economic growth in the U.S. and abroad.² Manufacturing labor productivity increased 4.1 percent in the first quarter of 2011 compared to the same quarter in 2010. This compares to productivity growth in the broader nonfarm business sector of 1.3 percent for the same period.³

However, manufacturing employment has been declining in the U.S. since its peak in 1979.⁴ As Figure 1 shows, this job loss has occurred even in non-recessionary periods. The downward trend in employment coinciding with an increase in productivity in manufacturing is not unique to the United States. As shown in Figure 2, output increased while labor input (hours) decreased significantly in the manufacturing sector across a range of developed countries from 1979 to 2009.⁵

¹ Susan Fleck, John Glaser, and Shawn Sprague, "The Compensation-Productivity Gap: A Visual Essay," *Monthly Labor Review* 134, no. 1 (January 2011), www.bls.gov/opub/mlr/2011/01/art3full.pdf.

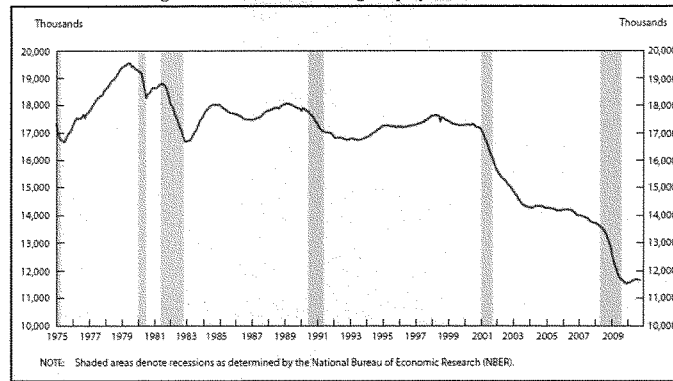
² *Engines of Growth: Manufacturing Industries in the U.S. Economy*, U.S. Department of Commerce, Economics and Statistics Administration, Office of Business and Industrial Analysis, July 1995, www.esa.doc.gov/sites/default/files/reports/documents/enginesofgrowth.pdf.

³ Bureau of Labor and Statistics (BLS), "Productivity and Costs: First Quarter 2011, Revised," news release, June 2, 2011, www.bls.gov/news.release/pdf/prod2.pdf.

⁴ Megan M. Barker, "Manufacturing Employment Hard Hit during the 2007–09 Recession," *Monthly Labor Review* 134, no. 4 (April 2011), www.bls.gov/opub/mlr/2011/04/art5full.pdf.

⁵ BLS, "International Comparisons of Manufacturing Productivity and Unit Labor Cost Trends, 2009," news release, December 21, 2010, www.bls.gov/news.release/pdf/prod4.pdf.

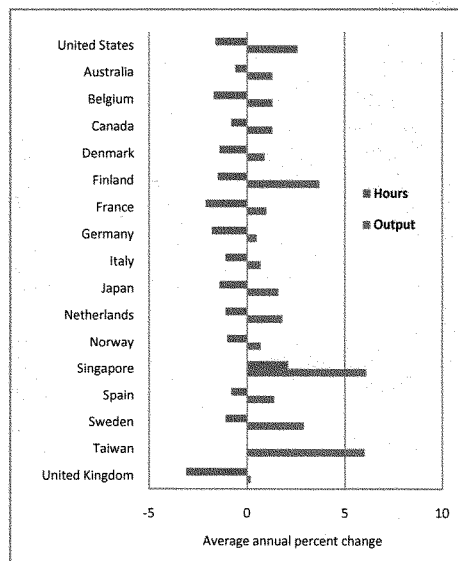
Figure 1. U.S. Manufacturing Employment, 1975–2010



Source: Bureau of Labor Statistics (monthly data, seasonally adjusted).

U.S. manufacturing employment was hit particularly hard by the recent recession. During the eighteen months of the recession, from December 2007 to June 2009, the manufacturing workforce declined by 15 percent, with more than 2 million workers losing their jobs.⁶ Job losses in the sector continued for six months after the recession officially ended, until December 2009, at which point manufacturing employment was lower than it had been since 1941.⁷ In addition to job losses, working hours of remaining employees were cut back, with total hours worked in the sector falling by 17.8 percent during the recession.⁸ As Figure 3 demonstrates, the average work week was reduced by two hours during the recession.⁹

Figure 2. Manufacturing Output and Hours, 1979–2009



Source: Bureau of Labor Statistics.

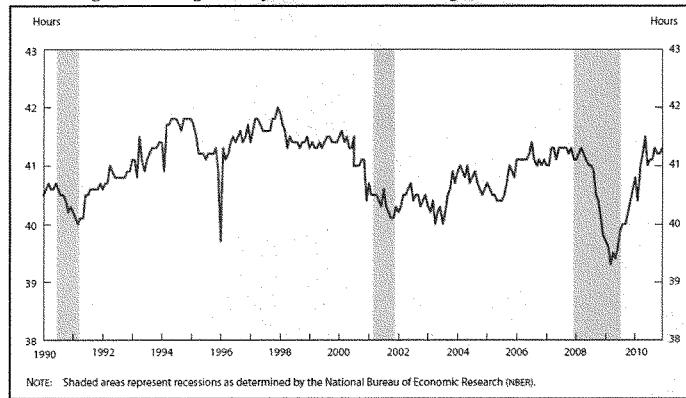
⁶ Ibid.

⁷ Ibid.

⁸ Timothy Dunne, Kyle Fee, and John Lindner, "Economic Trends: Manufacturing Hours and Employment in the Recovery," Federal Reserve Bank of Cleveland, June 7, 2011, www.clevelandfed.org/research/trends/2011/0611/01labmar.cfm.

⁹ Megan M. Barker, "Manufacturing Employment Hard Hit during the 2007–09 Recession."

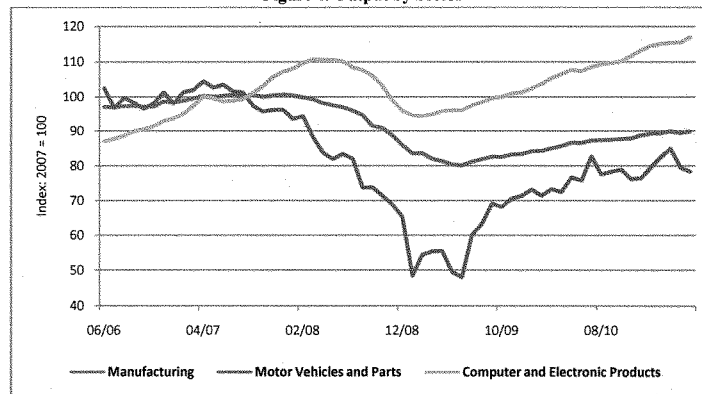
Figure 3. Average Weekly Hours of Manufacturing Production, 1990–2010



Source: Bureau of Labor Statistics (average weekly hours of manufacturing production and nonsupervisory employees, monthly data, seasonally adjusted).

Total manufacturing output also declined during the recession and has yet to fully recover. According to the Federal Reserve Board, manufacturing in the U.S. peaked in 2007 before declining 20 percent by June 2009. Since then, production has increased about 11 percent. It is important, however, to recognize the diversity within the manufacturing sector and the disparate performance of subsectors. For example, motor vehicle and parts production declined 50 percent during this same period and has recovered to about 80 percent of pre-recession levels. On the other hand, computer and electronic parts production is 17 percent above 2007 levels (see Figure 4).

Figure 4. Output by Sector



Source: Federal Reserve Board.

However, true to its reputation for driving economic growth, durable-goods manufacturing has begun to pick up and was a leading contributor in 2010 to U.S. economic growth. Manufacturing value added (which measures an industry's contribution to GDP) rose 5.8 percent in 2010.¹⁰ However, in view of the historical trends discussed above, we should not expect a sizeable increase in employment, even as output increases.

There is good news and bad news in this state of affairs. While the reduction in the amount of labor necessary for a given amount of production can reduce employment in the manufacturing sector, such productivity growth is a huge positive for workers, as it boosts wages throughout the economy. Growing consumer demand for services—another primary factor in manufacturing employment decline—is a sign of economic growth and development, as mirrored in other advanced economies, and creates new employment opportunities in the services sector.¹¹

The downward trend in manufacturing employment prompts some to conclude that the government should give special assistance to that sector. This approach is ill-advised. Policies aimed at steering resources toward one sector harm other sectors as resources are allocated from one activity to another. Subsidizing manufacturing would artificially prop up a sector that is changing due to natural market forces.

Addressing Existing Distortions

It is important for policymakers to understand the changes occurring throughout the economy, and today's hearing is an appropriate venue for gaining insight into the particular details within the manufacturing sector. However, as described earlier, the proper objective in the pursuit of fostering long-run economic growth is the adoption of broad, stable, and neutral growth policies, not targeted strategies to steer economic activity into particular segments of our economy. Before detailing one policy reform that meets this objective, it is important to recognize that myriad distortionary, non-neutral policies already exist.

One clear indication that the federal government has taken a special interest in the manufacturing sector is the existence of the Commerce Department's Manufacturing Initiative and the establishment of www.manufacturing.gov, which I consider to be an oxymoron in a free-market economy. The policies that favor manufacturing over other industries go beyond dedicated websites and agency initiatives. One such distortionary policy is a tax preference that favors manufacturing production over other forms of economic activity.

Section 199 Manufacturing Deduction. Passed in 2004, Section 199 of the Internal Revenue Code allows for producers of manufactured goods to claim a deduction of 9 percent of the value of attributable manufacturing income. Given that the corporate income tax rate is 35 percent, this deduction is approximately equivalent to a 3 percentage point reduction in the income tax rate on such income. Such "qualified production" income is defined to include not only domestic

¹⁰ Bureau of Economic Analysis, "2010 Recovery Widespread across Industries," news release, April 26, 2011, www.bea.gov/newsreleases/industry/gdpindustry/gdpindnewsrelease.htm.

¹¹ "The Manufacturing Sector," *Economic Report of the President*, chapter 2, 2004, http://fraser.stlouisfed.org/publications/erp/issue/1698/download/7523/erp2004_chapter2.pdf.

manufacturing activity but also the selling, leasing, and licensing of manufactured goods and the production of software, certain motion pictures, electricity, natural gas, agriculture, and construction services. Section 199 constitutes a tax expenditure and is estimated by the Joint Committee on Taxation to cost over \$60 billion from 2010–2014.¹²

The provision, which began in 2005 but has been in full effect only since 2010, is complex due to the difficulty in determining how to properly allocate costs and revenues between various goods and services provided by a firm. The IRS has designated the policy a “Tier 1” audit issue, and substantial paperwork requirements are associated with claiming the deduction. Section 199 can be considered a tax on non-manufacturing. This clearly violates the principles of neutrality for fostering long-run economic growth.

Recommendations and Conclusion

One way to reduce the distortion described above—and also mitigate other important harmful aspects of the corporate income tax system such as the distortions between debt and equity financing and between C-corporations and pass-through entities, and the competitive disadvantage faced by U.S. corporations competing with foreign domiciled entities—is to significantly lower the U.S. corporate income tax rate. A significant reduction would be of value to the manufacturing sector as well. Replacing Section 199 with a simple and significant reduction in the corporate rate—at least to 25 percent, if not lower—would both level the playing field between manufactured and non-manufactured production and improve the general competitiveness of all U.S. corporations. In addition, the tax simplification benefits would reduce costly tax compliance burdens imposed on the manufacturing sector.

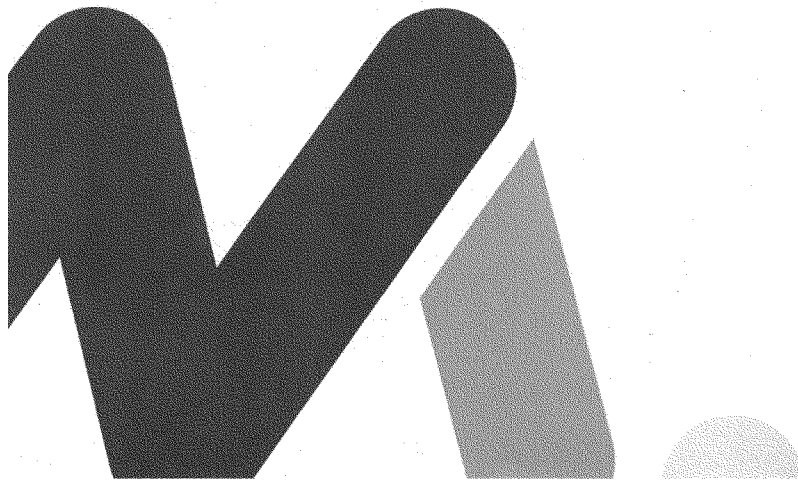
Corporate tax reform is not the only necessary change, just one critical step that would go a long way toward achieving a more neutral fiscal policy, which will be to the long-term benefit of the manufacturing sector and the economy at large. I believe that we cannot subsidize our way to prosperity. Similarly, we cannot maximize the success of the manufacturing sector or any other sector by limiting or restricting trade. Rather, we need sound business policy that facilitates a level playing field for all industries and promotes general economic growth. Regardless of the sector in question, the goal should be neutral, efficient, long-run fiscal policy.

¹² Joint Committee on Taxation, “Estimates of Federal Tax Expenditures for Fiscal Years 2010–2014,” December 15, 2010.



Testimony

of Jay Timmons
President and CEO
National Association of Manufacturers
before the Joint Economic Committee
on The State of U.S. Manufacturing
June 22, 2011



**COMMENTS OF THE NATIONAL ASSOCIATION OF MANUFACTURERS
BEFORE THE**

JOINT ECONOMIC COMMITTEE

JUNE 22, 2011

Chairman Casey, Vice Chairman Brady and Members of the Committee,

Thank you for the opportunity to testify on behalf of the National Association of Manufacturers (NAM) at the June 22, 2011, Joint Economic Committee hearing on the State of U.S. Manufacturing.

The NAM is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturers very much appreciate your interest in and support of the manufacturing economy.

Overview

Manufacturers are proud to be leading our nation's current economic recovery with increased productivity, renewed investment, employment, exporting and innovation. Even after the economic downturn, the United States remains the top manufacturing economy in the world, accounting for 21 percent of global manufacturing wealth.

The manufacturing sector employs nearly 12 million Americans earning 22 percent more in wages and benefits than the rest of the workforce. Since December 2009, manufacturers have been responsible for 14 percent of the net growth in employment, even though manufacturers account for roughly nine percent of the total nonfarm workforce.

U.S. manufacturers are twice as productive as workers in the next 10 leading manufacturing economies and perform two-thirds of all R&D in the nation, driving more innovation than any other sector. Indeed, manufacturing in America is the engine that drives the U.S. economy by creating jobs, opportunity and prosperity.

Nonetheless, the NAM remains concerned about the significant challenges faced by manufacturers in the United States. Despite the critical role the industry plays in the economy, taxes, legal costs, energy prices and burdensome regulations make it 18 percent more expensive to manufacture a product in the United States than in any other country.¹ That's without even taking into account labor costs.

Layered on top of these higher costs is the broad uncertainty faced by American businesses that includes "on-again, off-again" tax policy and an unpredictable regulatory

¹Leonard, Jeremy, "The Tide Is Turning," November 2008, Manufactures Alliance and The Manufacturing Institute.

environment. Manufacturers also increasingly are concerned about the impact of the historically-high levels of the federal deficit and the national debt on manufacturing and the overall U.S. economy.

Manufacturers very much appreciate the bicameral, bipartisan support for manufacturing in Congress including this Committee's focus on the state of U.S. manufacturing. NAM members also appreciate the strong interest in manufacturing expressed by the Administration. At the same time, the current support for our industry needs to be translated into specific policy changes.

The NAM's Manufacturing Strategy for Jobs and a Competitive America, is a comprehensive view of what is needed for manufacturing to succeed in the global market-place. The Strategy makes the case for a broader, more far-reaching and strategic approach toward manufacturing to help ensure that the United States will be:

- the best country in the world to headquarter a company and to attract foreign investment;
- the best country in the world to innovate and perform the bulk of a company's global research and development; and
- the best country in the world to manufacture both to meet the needs of the American market and serve as an export platform for the world.

We strongly urge the Committee to support NAM's Strategy and other policy changes outlined in more detail below that are designed to address many of the challenges faced by manufacturers and the broader U.S. economy.

A Pro-Manufacturing Tax Climate

The United States is no longer the dominant global player that it was in the 1960s and 1970s. American manufacturers today operate in a fiercely competitive global marketplace. A pro-manufacturing tax system is critical to their ability to compete. Our nation's high tax rates, worldwide tax system, and an unpredictable and less competitive R&D incentive pose significant burdens on U.S. manufacturers.

The United States has the second highest statutory corporate tax rate among the major industrial countries (OECD), trailing only Japan. Furthermore, other countries have been regularly lowering their tax rates to encourage economic growth.

One of the most important ways policymakers can create a competitive U.S. tax climate is to reduce the corporate tax rate to 25 percent or lower without imposing offsetting tax increases. An analysis last year by the Milken Institute, *Jobs for America*², concluded that reducing the U.S. combined (federal and state) corporate income tax rates to the average of OECD countries (27 percent) would stimulate growth in the manufacturing sector. By 2019, real GDP would rise by 2.2 percent (or \$376 billion) and 2.13 million private sector jobs would be created.

²Jobs for America, Ross DeVol and Perry Wong, Milken Institute, January 2010.

Lowering the corporate tax rate is only part of the solution. More than 70 percent of manufacturers are organized as "S" corporations or other "flow-through" entities and pay income taxes at individual rates. Lower individual tax rates in effect through 2012 have played an important role in helping these companies survive challenging economic times and in retaining and creating jobs. It is critical to smaller manufacturers that lower individual tax rates are extended and made permanent to create the certainty needed for long-term planning and free up resources needed for capital investments and jobs.

Investment abroad by U.S. companies generates U.S. exports and supports jobs in the United States. Despite the benefits to the U.S. economy of having American companies expand beyond our shores, U.S. tax laws make it more difficult for U.S. worldwide companies to thrive and compete in the global marketplace. Most OECD countries impose little or no tax on the income their resident companies earn from active businesses in other countries. In contrast, the United States has a worldwide system that taxes income regardless of where it is earned.

As a result, U.S. multinationals generally have a higher tax burden than non-U.S. multinationals—a significant disadvantage when U.S. companies are competing against non-U.S. multinationals and local firms for business in a global marketplace. If U.S. companies cannot compete abroad, where 95 percent of the world's consumers are located, the U.S. economy will suffer from both the loss of foreign markets and domestic jobs that support foreign operations.

In order to make U.S. worldwide companies more competitive, the NAM supports moving to a territorial tax system similar to systems in most industrial countries, structured to enhance U.S. competitiveness, not to raise additional revenue.

Innovation also is important to competitiveness and the R&D credit—first enacted 30 years ago—is a proven incentive for spurring private sector investment in R&D and domestic, high wage, R&D jobs. Unfortunately, the credit, which is used by small and large companies, is set to expire for the 15th time at the end of 2011. The uncertainty of an on-again, off-again credit influences companies' future R&D budgets, particularly when manufacturers are courted by other countries with more generous and permanent R&D tax incentives and lower corporate tax rates.

Given the critical role of the R&D credit in spurring innovation, one of NAM's top tax priorities is a strengthened, permanent R&D tax credit to make the United States a more attractive place to perform research. The R&D credit also is a jobs credit: Seventy percent of credit dollars are used for salaries of high skilled R&D workers. According to the Milken Institute's report, *Jobs for America*, if the credit were strengthened and made permanent, total manufacturing employment would increase by 270,000 within a decade.

A Progressive International Trade Policy

Even though the United States remains the world's largest manufacturer, producing one in every five dollars of all manufactured goods in the world, we steadily are losing ground in world markets. Manufacturers believe we need a trade policy that will strengthen manufacturing in America, improve our competitiveness and stimulate job creation at home. These objectives can best be achieved by limiting costs and other impediments imposed on U.S. manufacturers, opening foreign markets to our products,

leveling the playing field for American exporters in terms of exporter support and supporting effective and enforceable compliance to transparent rules of fair competition.

More than one in every five manufacturing jobs currently is dependent on exports and increasing exports is key to U.S. job creation. In order to create new jobs, production has to grow more rapidly than productivity. The U.S. domestic market for manufactured goods however, is not expected to grow more rapidly than it has in the past 20 years when manufacturing productivity exceeded the growth of output³. So if production is to outpace productivity and create new jobs, we will have to rely more on exporting to the more rapidly-growing markets overseas, particularly in Latin America and Asia.

Ten years ago the United States had a 13 percent share of world exports of manufactured goods. Last year the U.S. share was only 9 percent. If our share of world exports of manufactured goods had stayed at the 2000 level, last year our exports of manufactured goods would have been \$400 billion larger, and we would have eradicated our manufactured goods deficit.

The Administration's goal of doubling exports by the end of 2014 is a good starting place and we need effective policies and programs to achieve that goal. The NAM laid out a detailed plan for how the goal could be accomplished in our "Blueprint for Doubling Exports",⁴ which includes the major elements of a progressive trade policy for the United States.

The most important element of a progressive trade policy is a strategy that embraces market-opening bilateral and regional trade agreements. As our competitors race to negotiate barrier-reducing agreements for their companies, U.S. manufacturers are falling further and further behind in their ability to secure markets. Key to implementing that strategy is for Congress to provide the President with trade promotion authority (TPA). Our negotiating partners need the assurance that what is agreed to at the negotiating table will be what the Congress is asked to approve.

Many policy makers oppose trade agreements in the mistaken belief that these agreements are the cause of the U.S. manufacturing job loss. The opposite is true. Trade agreements have never been a major factor in our manufactured goods deficit, and over the past three years we have had a manufactured goods \$70 billion *trade surplus* with our trade agreement partners. During that same period, our manufactured goods trade deficit with countries without trade agreements with us was \$1.3 trillion.

A critical first step in addressing this problem is to pass and implement immediately the three pending trade agreements with Colombia, Korea, and Panama – agreements that are estimated to generate \$13 billion of new exports and support 100,000 jobs. These agreements have been pending in Congress for four years and during this time our competitors have not been idle. There are hundreds of trade agreements and many more being negotiated while the United States has FTAs with

³Over the past 20 years real gross manufacturing product growth has averaged 2.6 percent a year (about the same as overall GDP) while manufacturing productivity increased an average of 3.7 percent a year

⁴<http://www.nam.org/nei>

only seventeen countries. We need to get the pending agreements approved and then must move to complete the Trans-Pacific Partnership, and set our sights on agreements with commercially significant markets such as Brazil, India, the European Union, and others. The United States also needs to keep pressing for meaningful multilateral agreements in the World Trade Organization (WTO) as well, but we must not let that delay us from obtaining the quicker and deeper liberalization that bilateral and regional agreements provide.

In order to increase U.S. exports, it also is imperative that we modernize our outmoded export control system, which severely hampers the export of products that should no longer be controlled and does not provide effective protection of our security. The Administration has been very supportive of our efforts and we strongly urge Congress to act on the major changes needed. A study sponsored by the NAM concluded that we lose some \$60 billion of exports annually because of the existing export control system.

We also need to provide U.S. exporters with the kind of support received by companies in other developed countries. The Department of Commerce's export assistance programs are underfunded and pale in comparison to assistance provided by other countries. Similarly, even though the U.S. Export-Import Bank provides valuable support, its annual level of support of about \$25 billion is significantly lower than export support provided by banks in other countries including the \$80 billion in support provided by their Canadian counterpart and the \$150 billion in support provided by their Japanese counterpart.

Increasingly, U.S. companies are earning a significant share of their income from their overseas operations, and those affiliates are export magnets. Policies that protect our overseas investors like Bilateral Investment Treaties, and policies to welcome foreign investment in the United States are important elements in achieving our job, export and economic growth objectives.

Non-tariff barriers also need to be dealt with more effectively. Arbitrary standards, duplicative testing and certification rules, restrictions not based on risk or scientific evidence, and other barriers need to be addressed in our bilateral agreements and in a more forward-looking WTO. Strong intellectual property protection must also be part of our trade strategy. Innovation, product uniqueness, cutting-edge design, and other products of U.S. innovation make us competitive and this intellectual property must be protected. Better enforcement of existing agreements and stronger forms of cooperation to root out counterfeiters and intellectual property pirates are essential.

All nations need to be held accountable for their obligations under international trade rules, and the United States needs to take effective steps when needed against unfair trade practices under the dispute settlement procedures available to us. We need to ensure that we get what we bargained for in the WTO and in bilateral agreements, and must also ensure that the effectiveness of our laws against unfair trade practices is not diminished.

The issues outlined above are key components of an effective trade strategy. We also encourage the committee to look carefully at the NAM's "Blueprint for Doubling Exports" for the full range of steps and initiatives that are needed.

A Comprehensive Energy Strategy

Affordable and reliable energy also is essential to manufacturers, the prosperity of American workers and our nation's overall economy. The manufacturing sector uses more than one-third of the energy consumed in the United States, and even more when product transportation is factored into the equation. Energy is indeed the lifeblood of manufacturing —manufacturers convert fuels to different forms of energy to manufacture all the products of daily life and the intermediates from which those products are made. However, a number of regulations including the greenhouse gases (GHG), ozone and those under the Clean Water Act will increase the cost of energy for manufacturing. This will decrease the manufacturers' ability to retain jobs and to remain globally competitive.

A comprehensive energy strategy is essential to the long term economic health of the United States and we urge Congress to craft a concise, comprehensive and thoughtful plan that addresses the energy needs of this country for the next 30 to 40 years.

It is critical that any comprehensive plan expand access to our nation's domestic energy supply in order to meet current needs for affordable energy. Manufacturers support an energy strategy that embraces all forms of domestic energy production while expanding existing conservation and efficiency efforts. Manufacturers and consumers will continue to rely upon all sources of fuel and energy for decades to come.

Oil, natural gas and clean coal remain essential contributors to America's energy security. The U.S. nuclear energy industry is well-positioned to expand its critical role in providing safe, affordable and reliable power. Alternative fuels and renewable energy sources like wind energy and solar power will also gain increasing importance in the future. Therefore, more of our energy needs to come from domestic sources and NAM believes it would be unwise to exclude any form of energy from our energy strategy.

One example of a domestic source of energy that needs to be continuously explored and developed is the oil and gas in the Outer Continental Shelf (OCS). We thank the distinguished members of the White House Jobs Council, Commerce Secretary Locke and others in the Administration for their commitment to advancing the permitting process for offshore drilling. However, the permitting process is slow and at times confusing. Permits need to be issued for manufacturers to continue to return to the OCS and to begin to safely explore and drill again. Not only will this provide a reliable and affordable source of energy for manufacturing, it will also generate jobs and revenues.

Off the coast of Alaska alone, there are an estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas. The Beaufort and Chukchi OCS have a great deal of potential in terms of domestic supply of energy, job growth and government revenues. It is estimated that they have the potential to create an annual average of 54,700 new jobs nationwide for the next 50 years. Also, drilling in these areas can generate an estimated \$193 billion in federal and state government revenues.

National energy policies should also rely on the marketplace and its proven ability to meet the nation's energy needs. The NAM is opposed to the imposition of taxes levied on particular sectors of the economy. The ramifications of singling out energy or

any other particular sector for tax increases would introduce a series of distortions in the economy.

Beyond these domestic sources of energy, manufacturers are doing their part in innovation and energy efficiency. There is no sector of the economy more supportive of energy efficiency than manufacturers. Manufacturers perform 50 percent of the research and development in the United States and are the leaders in developing and deploying innovative solutions across the manufacturing economy. No segment of American society has as much to gain from efficiency and waste reduction measures as the manufacturing sector and the consumers they serve. In fact, over the past 30 years, the energy efficiency of U.S. industry has improved remarkably. Energy intensity, the amount of energy it takes to produce one dollar of goods, has been cut in half, from 9.13 thousand Btu in 1970 to 4.32 thousand in 2003. Roughly half of the reduction in energy intensity can be attributed to energy efficiency improvements—using less energy to do the same amount of work.

A Pro-growth Regulatory Environment

Another significant challenge facing manufacturers is the costly burden of regulatory compliance in the United States. The burden of regulation falls disproportionately on manufacturers, particularly on small manufacturers because compliance costs typically are not affected by economies of scale.

The NAM welcomed the clear, new direction on regulation announced by President Obama in January in his op-ed in *The Wall Street Journal*, through his Executive Order 13563 and his memorandum on small business regulatory flexibility. With this new direction, Congress and the Administration should scrutinize the past two years of regulations and those currently under consideration to determine if they are consistent with a national mission of jobs and economic growth. Regulatory agencies must be held accountable to the principles for rulemaking articulated in the President's Executive Order.

Manufacturers applaud some recent actions that are completely aligned with this Executive Order and this new direction, in particular the recent decision by the Environmental Protection Agency (EPA) to stay the regulation of industrial and commercial boilers (the Boiler MACT rules) and accept a petition for reconsideration of several unnecessarily costly proposals. If implemented in its original form, the Boiler MACT rules would have cost thousands of manufacturing jobs and devastated sectors like the forest and paper products industry, which has been hit especially hard by the recent recession.

Despite some encouraging developments, some agencies are still pursuing costly and unjustified proposals. As noted above, EPA's regulation of greenhouse gas emissions and proposed ozone air quality standards will drive up energy costs, hurting domestic manufacturers' competitiveness in the global economy.

Manufacturers are particularly concerned with the EPA's proposal to make the National Ambient Air Quality Standard (NAAQS) for Ozone implemented by the previous Administration even more stringent, despite the fact that compliance with the current rule is enormously expensive for companies and reconsideration was not required by law. This action by the EPA is tantamount to moving the goal posts in the middle of the

game. According to the Manufacturers Alliance/MAPI, a more stringent ozone proposal would result in the loss of 7.3 million jobs by 2020 and add \$1 trillion in new regulatory costs per year between 2020 and 2030.

The NAM encourages Congress to work with the Administration and the EPA to defer this reconsideration altogether and devote resources to the five-year review mandated by law and required in 2013. This would send a strong signal to the marketplace of a common-sense approach to regulation and a step toward increasing certainty.

As part of this effort, policy makers should reform the design of our regulatory system to produce a more competitive economy. Several institutions in government already are dedicated to analyzing the impacts of regulation on the economy and the public; these institutions should be strengthened and given additional resources.

The Office of Information and Regulatory Affairs (OIRA) at the Office of Management & Budget (OMB) is the central clearinghouse for significant rulemaking by non-independent agencies. Despite its critical function, OIRA has shrunk as the rest of the federal government has grown in size and scope, with the number of employees at OIRA dropping from 90 to 50 employees and the federal government staff dedicated to writing, administering and enforcing regulations increasing from 146,000 to 242,000.

Within the Department of Commerce, the Office of Industry Analysis assesses the cost competitiveness of American industry and the impact of proposed regulations on economic growth and job creation. Unfortunately, there is an on-going attempt to redirect the efforts of this office and undermine its ability to participate effectively in a competitiveness review of regulation at a time the role of this office should be strengthened.

The Small Business Administration's (SBA) Office of Advocacy helps federal agencies implement the Regulatory Flexibility Act (RFA) and its amendments. The RFA requires agencies to consider the needs of small businesses when drafting regulations. Currently, under the RFA only a small number of regulations require this analysis because "indirect effects" cannot be considered and the small business panel process only applies to three agencies. In the past, this process has saved billions of dollars in reduced regulatory costs for small businesses. The NAM supports reforms to the RFA.

On a broader note, while Congress plays an important role in the regulatory process, it does not have a group to develop cost estimates of proposed or final regulation. A Congressional office for regulatory analysis under the Congressional Budget Office could result in a more thoughtful analysis of the regulatory authority granted by Congress, provide Congress with better tools to analyze agency regulations and allow Congress to engage in some more holistic reviews of overlapping and duplicative statutory mandates that have accumulated over the years.

In addition, Congress should confirm the President's authority over independent regulatory agencies. Consistency across the government in regulatory procedures and analysis would only improve certainty and transparency of the process.

Manufacturers firmly believe that the President's effort to review old, outdated regulations should be made permanent. The best incentive for high-quality retrospective

reviews of existing regulation is to automatically sunset those rules that are not affirmatively chosen to be continued. The federal government imposes on the public more than 9.9 billion hours of paperwork burden annually and this burden continues to grow. Although a large number, this underestimates the total time spent on compliance. Despite some successful efforts to limit these burdens they will never be substantially reduced without sun setting the underlying regulatory requirements. Congress has considered sunsets and retrospective reviews in the past and we support common-sense regulatory reform that forces agencies to modernize or eliminate outdated rules.

Another step in regulatory reform is to update the 65-year old Administrative Procedure Act (APA). Specifically, the NAM recommends that Congress incorporate the principles and procedures of President Obama's Executive Order 13563 and President Clinton's Executive Order 12866 into the APA to create greater certainty and improve regulatory outcomes. Since the APA applies to all agencies, including independent regulatory agencies, this is another way to ensure more uniform accountability across the government

A 21st Century Infrastructure

As the world's largest manufacturing economy, the United States also requires long-term investments in transportation and a comprehensive 21st infrastructure strategy to help ensure our future competitiveness in international markets. Competitors in Asia, Europe, and South America continue to ramp up investments in all types of infrastructure while we struggle to maintain crumbling highways, obsolete bridges, aging public transit, overstressed water and wastewater systems and outdated air traffic control technology.

While our nation faces many fiscal challenges, making key investments in infrastructure should not be delayed. Manufacturers rely on a productive system of roads, rails, ports, inland waterways and airports for receiving raw materials and shipping finished products to customers throughout the United States and the world. The nation loses 4.8 billion hours of extra time a year due to traffic tie-ups and traffic congestion costs Americans \$115 billion a year in wasted time and fuel.

The needs of the system are enormous and require innovations that include capital budgeting and planning, prioritizing and funding transportation projects of regional and national significance, a welcoming climate for private infrastructure investment, new federal bonding approaches, environmental permit streamlining and elimination of redundant state and federal regulations that promote greater flexibility to the states.

A Skilled Workforce

According to employers, one of the key issues for manufacturers is the need for a skilled workforce. Manufacturers applaud President Obama's support for strong partnerships between manufacturers and community colleges to make manufacturing credentials available nationwide and help close the skills gap. This supports NAM's goal, driven by The Manufacturing Institute, to provide 500,000 more skilled workers for the manufacturing industry within the next five years.

The NAM also is encouraged by recent developments to reauthorize the Workforce Investment Act. This long-awaited, bi-partisan effort to reauthorize these programs is an important first step in improving and strengthening employment, education, training and vocational rehabilitation services in our country. The NAM believes Congress should continue the process of refining this legislation to meet the needs of employers and employees by promoting and emphasizing nationally portable, industry-recognized skills credentials within WIA as well as other workforce development programs.

With respect to achieving and maintaining an appropriate balance in labor relations, the NAM is very concerned about the effects of a recent complaint filed by the Acting General Counsel of the National Labor Relations Board (NLRB) against the Boeing Company. While I do not wish to argue the merits of the case, which are clearly in dispute, from a policy standpoint the remedy sought by the NLRB in this case is causing a great deal of uncertainty among NAM members. In fact, the decision could have serious negative impacts on capital investment and hiring across the United States until this situation is resolved.

Other cases and actions being taken by the NLRB also bring up questions of the proper role this agency plays in the workforce. For example, the NLRB has undergone a proposed rulemaking that would require all employers to post "unionization rights" in their workplaces and send the same notice to employees through electronic means. The NAM filed comments with the NLRB questioning whether they even have the authority to require all employers to do anything since the National Labor Relations Act is conspicuously silent on this matter. This concerning trend continues. On June 21, the NLRB proposed new regulations that will limit employees' ability to make informed decisions by drastically shortening the time frame for union elections to just a few days.

Recent enforcement activities by the Occupational Safety and Health Administration (OSHA) also are a concern for our members who have noticed a shift in posture or attitude from compliance assistance to a "gotcha" enforcement approach. We believe by assisting employers in complying with what can often be complex regulations is a more productive approach to creating safe workplaces.

Addressing Our Nation's Fiscal Challenges

Manufacturers also are focused on the long-term impact of the federal deficit and the national debt. In fact, the debt and the deficit were topics of sessions at several recent NAM meetings of our Board of Directors and Executive Committee.

A strong manufacturing sector provides reliable, good-paying and reliable jobs and adds to the tax base at all levels of government. As business owners and job providers, NAM members are fearful that our nation's fiscal situation will put upward pressure on interest rates, which in turn will raise the cost of capital, discourage business investment and reduce capital per worker, productivity, real wages, and living standards. In light of what has happened overseas, manufacturers also are concerned about the negative impact of our deficit and national debt on foreign direct investment in the United States.

NAM members firmly believe that our nation cannot resolve its fiscal problems on the backs of business and that we must take a long hard look at federal outlays and how

we can control federal spending. NAM members have long maintained that Congress and the Executive Branch should work to control spending so that the federal revenue gain from economic growth and good tax policy can decrease future projected federal deficits. An important part of this effort should be to investigate ways to get government spending in sync with federal revenue receipts, which has averaged 18.5 percent of GDP in non-recessionary years since 1950. The most significant factors contributing to future deficit growth are the run-away costs associated with U.S. entitlement programs.

It is critical for policy makers to review entitlement programs, including Social Security. The beginning of the Baby Boom retirements, and a decline in payroll taxes because of high unemployment rates, are cutting into the Social Security trust fund. In fact, more people filed for Social Security in 2009—2.74 million—than ever before. In addition, 2010 was the first year since 1983 that the federal government paid out more in Social Security benefits than it collected in payroll taxes.

We also urge Congress to take a hard look at Medicare and Medicaid, particularly in light of the demands on these programs under the new healthcare legislation. Manufacturers believe cost savings can be achieved through reforms that include value-based purchasing and other incentive programs to encourage evidence-based medicine. These programs should integrate efforts to help consumers make better health decisions, which will drive down costs. In addition to these changes, manufacturers recognize that in order to achieve long term stability, tough choices will need to be made about eligibility criteria, indexing of benefits and the overall scope of these programs.

Discretionary spending, while a much smaller part of the federal budget, also warrants close scrutiny. Spending programs should be subject to continuous review so that budget outlays can be controlled by reducing, restructuring or terminating outmoded or non-essential programs.

Conclusion

After the deepest recession in seven decades, America's economy is beginning to recover, striding the long way back toward expansion and employment. Manufacturers are proud to be leading the way. Indeed, now is American manufacturing's moment and we cannot take these recent improvements for granted. If we are to set a path for sustained economic growth, job creation and long term competitiveness, policy makers must embrace a comprehensive strategy. As outlined above, more can and must be done to make the U.S. manufacturing sector more competitive, more productive, and better able to create even more high-paying jobs.

The policy objectives outlined above - pro-competitiveness tax rules, a 21st century trade policy, a viable and globally competitive domestic energy industry, common-sense regulatory reform, critical infrastructure improvements and a skilled workforce that is able to understand new technologies and manufacturing processes - will go a long way to creating a climate that is more suited to the global competitiveness challenges that manufacturers face. At the same time, a serious effort to get our nation's fiscal house in order will lead to much needed stable and durable economic growth.

Thank you for the opportunity to share our views on the opportunities and challenges facing manufacturers in the United States. As the preeminent U.S.

manufacturers association and the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states, we are committed to working with you to advance legislation that, will allow manufacturers in the United States to compete effectively in the global marketplace.

Supplemental Sheet

Joint Economic Committee
Hearing on the State of U.S. Manufacturing
June 22, 2011

Statement by:

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**TESTIMONY OF
SCOTT N. PAUL
EXECUTIVE DIRECTOR
ALLIANCE FOR AMERICAN MANUFACTURING
BEFORE THE
JOINT ECONOMIC COMMITTEE
HEARING ON
"MANUFACTURING IN THE USA: WHY WE NEED A NATIONAL
MANUFACTURING STRATEGY?"
JUNE 22, 2011**

Chairman Casey, Vice-Chairman Brady, and members of the Committee, I want to thank you for taking the time to examine the state of American manufacturing and for inviting me to testify on behalf of the Alliance for American Manufacturing.

First, I would like to introduce the Alliance for American Manufacturing to you. We are a partnership formed in 2007 by some of America's leading manufacturers and America's largest industrial union--the United Steelworkers--to work in a cooperative, non-partisan way with one goal: strengthening American manufacturing and therefore our nation's economic and national security. Our mission is to provide policymakers like you with credible analysis of the issues, as well as innovative policy ideas to move us toward effective solutions. In an increasingly intense partisan climate, we believe that our labor-management partnership can help identify appropriate avenues for cooperation. In our first four years, we are proud to have helped spur a robust debate on a manufacturing strategy for our nation.

We believe, as we imagine you do, that a strong and vibrant manufacturing base is essential to our nation's economic stability, a strong middle class, and employment opportunities for young men and women across America. We also believe that our nation will never realize its full potential to grow the manufacturing sector of our economy without a robust strategy and aggressive set of public policies to complement private sector efforts by business and labor to maintain a globally competitive industry.

The idea of a manufacturing strategy is hardly a radical concept, and a robust strategy has been at the core of American economic policy for all but a few, brief periods of our history. Today's dearth of public policy to boost manufacturing is the exception, not the rule, dating all the way back to our Founding Fathers.

Alexander Hamilton constructed America's first industrial policy in 1791. Setbacks during the War of 1812 due to a lack of domestic capacity to build naval vessels and military equipment cemented the determination of the federal government to grow manufacturing, a policy that continued until the end of World War II. Globalization and economic approaches favoring imports and domestic consumption over exports and production have helped to steadily erode manufacturing as a percentage of Gross Domestic Product, private sector employment, and other key measures.

The idea of a manufacturing strategy is also not a partisan one. President Reagan--spurred on by a Democratic Congress--adopted a flurry of measures to counter a grossly imbalanced trade relationship with Europe and Japan in the 1980s. The Plaza Accords,

which raised the value of currencies in Japan and Europe relative to the dollar in a managed way, had a positive effect in lowering our current account balance over time. Key government investments in the semiconductor industry and other technologies spurred their development and commercialization. President Reagan signed into law enhanced Buy America requirements for certain infrastructure projects to boost domestic employment. His Administration implemented the Market Oriented Sector Specific--or MOSS talks--with Japan that focused on market access with measurable results.

More recently, President Obama and Congress worked together to provide loans and the breathing space our domestic auto industry needed to rebuild, retool, and thrive. The effort wasn't perfect, but it was a necessary step to stabilize one of the support structures for domestic manufacturing employment and production. As important as that step was, it was an "Emergency Room" manufacturing strategy, and not a long-term effort to grow manufacturing jobs, capacity and output.

The case for a permanent capacity for strategic planning on our manufacturing base, evolving to make use of our workers' skills and the latest technology as well as responding to global trends, could not be stronger when one considers that no matter how innovative or competitive individual manufacturers may be, there are some problems they simply cannot solve on their own, as recently articulated by Jared Bernstein of the Center on Budget and Policy Priorities:

- Research and development can be expensive and hard to capture profits, such as in advanced batteries;

- No single firm could possibly coordinate national projects like the smart grid or internet;
- Firms often need assistance in applying academic innovations to the production process;
- Manufacturers often face barriers to accessing credit for entry, expansion, and innovation; and
- Manufacturers need assistance in exporting as well as push back against unfair trade practices.

Contrary to a widely held belief, manufacturing employment actually held steady from 1982 to 1999, hovering around 17.2 million jobs, with ebbs and flows in downturns and recoveries. There were a number of reasons for this stability, including more aggressive trade enforcement and currency policies in the 1980s and more domestic investment in the 1990s. But manufacturing employment has dropped precipitously since China entered the World Trade Organization in 2001 and our bilateral trade deficit has exploded. We have concluded that--outside of the collapse of the auto and housing markets in 2008--the single most detrimental factor to manufacturing employment in the United States has been the expansion of our one-sided trade relationship with China. China is certainly not our only competitor engaged in unfair, predatory and protectionist policies, but the scale of their activities swamps that of many of our other trading partners and is in need of immediate attention.

We need a robust manufacturing strategy because the fate of the industrial sector of our economy is too important to be left to a gaggle of competing and ultimately unsatisfying theories of why it is declining in real employment terms, as a share of world output and exports, and as a percentage of our GDP. The decline of manufacturing is not inevitable, desirable, nor can it be explained solely through theories of churning capitalism, advances in productivity and technology, high regulatory, tax, and compensation costs, or inefficiency.

For instance, Germany's global shares of manufacturing output and exports have held steady over the past decade, while America's have declined and China's have risen sharply. Yet, Germany is not a low-cost nation for manufacturing; average manufacturing wages in Germany are \$48 an hour compared to \$32 per hour in the United States. Germany has an integrated strategy for boosting manufacturing, focusing on skills, technology, investment, demand-side incentives, labor-business-government collaboration, and aggressive trade policies, which allow it to successfully compete. Germany is a world leader in advanced manufacturing and solar panel production because it wants to be, and all stakeholders work together to make it successful. How does Germany have balanced trade with China while the U.S. runs monthly China trade deficits of more than \$20 billion? There are many possible reasons, but the principal explanation is because that particular metric matters to policymakers in Germany, while it doesn't seem to matter enough here in Washington, DC.

Support for a national manufacturing strategy is growing among serious economists, business leaders, as well as labor leaders. Andy Grove, the former CEO of Intel, wrote a BusinessWeek cover story on this very topic, and other executives have weighed in as well with books, speeches, and fresh ideas.

A national manufacturing strategy would give a significant boost to getting the government back on the side of America's manufacturing workers and those companies seeking to expand domestic production in the United States. What does American need to do to create more manufacturing jobs?

First, pass legislation to allow American workers and firms to seek relief from the effects of currency manipulation by China and other countries using our existing trade laws. Such legislation would provide our manufacturing sector with an effective tool to seek a level playing field, and it would also deter China from continuing this highly protectionist and mercantilist practice. We need this to happen now because, according to the Economic Policy Institute, if China appreciated the Yuan to a market-based level, over the next two years, America would see a significant boost in GDP (up to 1.9%), 2.25 million more jobs, and \$71 billion annually in deficit reduction. This would have a much more far-reaching economic impact than even the rosiest scenarios imagined for the highly controversial free trade agreements with South Korea, Colombia, and Panama.

In addition, China's cheating on indigenous innovation, its web of industrial subsidies and state-owned enterprises, its rare earth minerals export restrictions, and its rampant

intellectual property theft must all be aggressively confronted. Enforcing our trade laws more aggressively is key to not only restoring economic growth and our manufacturing sector, but also to restoration of public confidence and trust in their elected leaders that when they work hard and play by the rules, their government will stand up for their rights and interests. Congress has the power to self-initiate certain types of trade cases--it should use that power, rather than sit on the sidelines. When we deploy our trade laws, we achieve results: industries such as tires and oil country tubular goods have stabilized in states across the nation, including Pennsylvania and Texas.

Second, retool the Obama Administration's initiative to double exports--the National Export Initiative--to put the focus on reducing our manufactured goods deficit to zero. That's a far more accurate metric for success or failure in the manufacturing sector than increases in exports that may be offset by a flood of imports.

Third, resist the temptation to encourage the Federal Reserve to pursue a stronger dollar policy, which would put our exporters at a disadvantage with their European and Asian competitors and run counter to efforts to reduce damaging global imbalances.

Fourth, make positive tax changes targeted towards manufacturing such as enhancing the section 48(c) clean energy manufacturing tax credit, dramatically expanding support for industrial energy efficiency efforts, and maintaining accelerated depreciation for plant and equipment investments. The proposal contained in the Simpson-Bowles plan to cut the top marginal corporate tax rate, using various domestic manufacturing tax deductions

as offsets, would impose an estimated \$48 billion tax increase on manufacturers while producing a windfall for Wall Street, according to an Ernst & Young analysis. This makes absolutely no sense. The idea that a revenue-neutral corporate tax cut would be good for manufacturing is tenuous, at best. There appears to be little or no correlation between marginal tax rates and global competitiveness. A more significant factor is the presence of value added tax (VAT) systems with rebates for exports in virtually every industrialized and industrializing country except ours.

Fifth, while duplicative and unnecessary regulations should be reformed or eliminated, pursuing a race to the bottom with countries like China is foolhardy and ineffective as a means to boost our global competitiveness. A high-road strategy is the only feasible one for our nation. Advances in technology are making industries more sustainable, and ultimately, more competitive. The idea of rolling back decades of protections for workers and the environment is an exercise in futility, and time and resources would be better spent elsewhere. The goal should be for other nations to aspire to the quality of life that Americans enjoy, not to discard our efforts through a downward competitive spiral.

Sixth, investing in infrastructure is essential. The 2009 Recovery Act helped to accelerate infrastructure spending but that cycle has slowed and has not helped foster long-term demand. Expanding infrastructure investment and creating a national infrastructure bank that will ensure a long-term, sustained funding effort for restoring and updating our nation's infrastructure is key to that effort. We must ensure that, to the maximum extent practicable, public funding be coupled with adherence to Buy America requirements.

This can provide important support to our manufacturing sector in a manner that is fully compliant with our international obligations.

Finally, enhance the skills and training infrastructure in the United States. Boosting skills and training for Americans who want to work with their hands as well as with their minds is absolutely critical. Our nation needs a comprehensive network of opportunities, beginning in high school, progressing through community colleges, and continuing into lifelong learning. We are encouraged by the *Skills for the Future* initiative supported by the Administration and advanced by a large number of manufacturing associations, companies, and community colleges.

The United States is falling behind the rest of the industrialized world in preparing our workforce for highly skilled careers in manufacturing. Our stakeholders work every day to provide skills and training to new and displaced workers, but they face long odds as blue-collar work has fallen out of fashion, and along with it the infrastructure to prepare Americans for manufacturing careers.

The *Skills for America's Future* partnership is a very promising initiative. To make it work, we will need better training opportunities in high school and, more than anything else, we will need to bust the myth that there is no future for a young man or woman in the factory. It's incumbent on all of us to break down the walls that students, parents, teachers, and counselors may have erected to considering careers in manufacturing. Manufacturing today is far different from the image projected by factories fifty years ago.

Today, a modern steel facility will have far more workers in air-conditioned rooms at computer terminals than those engaged in demanding physical activity. We need to do a better job of outreach and education, and we need the right set of policies to boost manufacturing in America so that we will continue to create opportunities for workers.

Chairman Casey, we have offered here a comprehensive plan of bold options for your consideration. The Alliance for American Manufacturing is ready to tackle these challenges with you, the President, leaders in Congress and others. Thank you for taking the time to examine the importance of manufacturing and to consider strategies to revitalize this important sector of our economy.



EPI BRIEFING PAPER

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THE BENEFITS OF REVALUATION

Full revaluation of the Chinese yuan would increase U.S. GDP and employment, reduce the federal budget deficit, and help workers in China and other Asian countries

BY ROBERT E. SCOTT

For the past several years, the best economic research has shown that China needs to increase the value of its currency, the yuan, against the U.S. dollar by 25% to 30%. One year ago, China's central bank said that it would "allow the country's currency to float more freely against the dollar and other foreign currencies" (Richburg and Pomfret 2010). Since then, the yuan has inched up at a glacial pace, rising only 5.5% through June 14, 2011. Meanwhile, China has accelerated purchases of dollars and other currencies, adding \$597 billion to its foreign exchange reserves in the past year, which reached \$3.055 trillion in March 2011. While appearing to let the yuan float, China has actually increased its currency intervention by amassing record amounts of foreign exchange reserves to prevent meaningful appreciation of the yuan.

If the yuan (also known as the Renminbi or RMB) and satellite currencies were revalued to their equilibrium levels, U.S. gross domestic product would increase as much as \$285.7 billion (1.9%), creating up to 2.25 million U.S. jobs. Although it would take 18 to 24 months to achieve these full benefits, this growth would reduce the U.S. budget deficit by up to \$71.4 billion per year.

Currency manipulation is also costly for China and other Asian countries that follow China's lead. China, however, has resisted pressure to fully revalue its currency out of fear that it would reduce exports and hurt its domestic employment. This resistance means these Asian countries are suffering from rapidly rising inflation that is undermining real wages and fueling asset price bubbles; full revaluation by China and other currency manipulators, such as Hong Kong, Taiwan, Singapore, and Malaysia, would lower their domestic costs for food, oil, and other commodities, reducing inflationary pressures, and it would increase the purchasing power of their domestic workers. Revaluation is a "win-win" scenario for the global economy.

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Key findings of this report include:

- A 28.5% revaluation of the yuan/dollar exchange rate by China alone would increase U.S. GDP by \$207 billion dollars. If other countries in Asia such as Hong Kong, Singapore, Taiwan, and Malaysia also revalued too, U.S. GDP would increase by \$285.7 billion, or 1.9% (including the China effect). These benefits would be achieved in 18 to 24 months.
- A full revaluation by China alone would reduce the U.S. current account deficit (the broadest measure of the U.S. trade deficit) by \$138 billion; if other Asian countries also revalued, then the U.S. current account would improve by \$190.5 billion.
- If only China revalued by 28.5%, the growth in U.S. GDP would support 1,631,000 U.S. jobs. If other Asian countries also revalued, then 2,250,000 jobs would be created, enough jobs to increase total U.S. employment by 1.6% (over the level in May 2011).
- Creation of 2,250,000 jobs would be sufficient to reduce the U.S. unemployment rate by at least one full percentage point.
- If only China revalued, then the growth in GDP (which would increase tax revenues) and the rise in employment (which would reduce federal-safety net spending) would reduce the federal budget deficit by \$51.7 billion (0.34% of GDP) per year. If other Asian countries also revalued, then the federal budget deficit would be reduced by \$71.4 billion (0.47% of GDP) per year. State budgets across the country would also be improved by the growth of tax revenues and the decline in unemployment, Medicaid, and other safety net expenditures.
- Over 10 years, if sustained, full revaluation by China and other Asian currency manipulators could reduce the cumulative U.S. budget deficit by up to \$621 to \$857 billion. These savings could be achieved at no cost to the U.S. government.
- Revaluation by China is one of the only deficit-cutting tools available that will stimulate economic growth and job creation; other proposals for deficit reduction

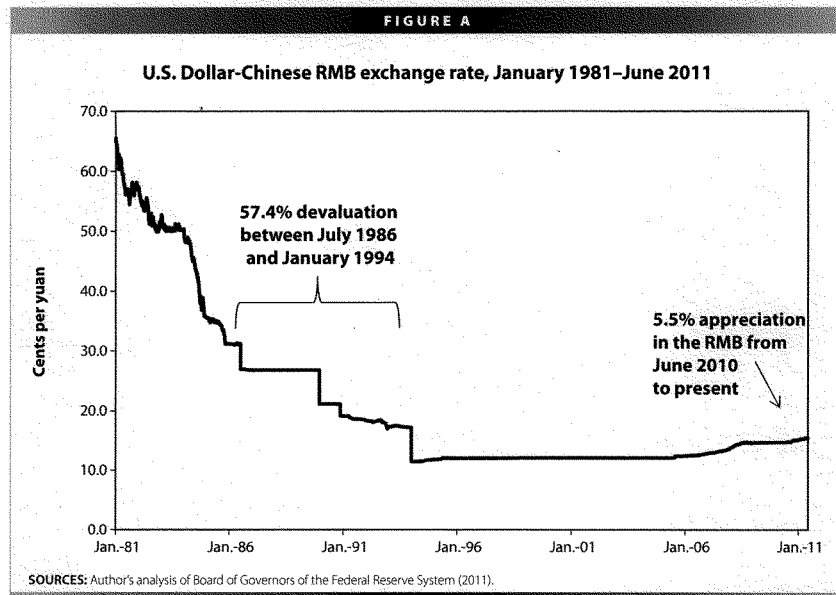
involving spending cuts or tax increases will reduce domestic growth and employment.

- The inflation rate in China reached 5.5% in May 2011; food and oil prices, which make up a larger share of budgets in China than in the United States, have been rising at double digit rates. Full revaluation by China and other Asian countries could lower inflationary pressures and boost real wages, reducing the threat of future asset bubbles and cooling these overheated economies. It would also rebalance growth in the global economy, helping to restore demand in the United States, Europe, and other countries where growth has slowed dramatically in the past year.

The need for currency realignment

The best estimates are that the Chinese RMB was undervalued by 25-30% in May 2011. One of the major contributors to China's phenomenal growth over the past 15 years was its decision to massively devalue the RMB in the late 1980s and early 1990s, and to tie its currency to the dollar thereafter. Between July 1986 and January 1994 the RMB was devalued by 57.4%, as shown in **Figure A**. In addition, during the late 1990s and for most of the past decade, China has sustained very low inflation rates, which further reduced its real exchange rate. China's low, fixed exchange rate made it a very attractive location to invest for multinational companies from the United States and around the world. China became the largest host to foreign direct investment in the developing world, and foreign invested enterprises were responsible for 55% of China's exports and 68% of its trade surplus in 2010, as reported by China (Scott 2011). The United States also became one of China's most important markets.

There is an extensive literature on the undervaluation of the RMB, both on a trade-weighted basis, and against the dollar. Goldstein and Lardy (2008) review the literature, noting ranges on the undervaluation of the renminbi as high as 50% (Dunaway and Li 2005), and mention their 2007 paper in which they found a 10% increase in China's real effective exchange rate to be associated with a 2.0-3.5% increase in China's trade balance, which in 2008 would suggest that the renminbi was undervalued between 30-55% relative to the dollar. Similarly, Ferguson



and Schularick (2009) use unit manufacturing costs to estimate the degree of undervaluation of the RMB relative to the dollar to be between 30-50%. Recently, Bergsten (2010) found the renminbi would need to appreciate by 25% on a trade weighted basis, or 40% to the dollar to maintain equilibrium. Subramanian (2010) estimated that the RMB was 30% undervalued on a purchasing power parity basis. Thus, there is widespread agreement in the literature that the RMB is at least 25-30% undervalued.

Beginning in 2008, Cline and Williamson (2008-2011) have produced a series of reports on Fundamental Equilibrium Exchange Rates (FEERs) that have consistently shown that the RMB is undervalued by 24-40% (current estimate is 28%) relative to the dollar. It is important to note that Cline and Williamson's estimate of the equilibrium value of the RMB, relative to the dollar, rose from 24.2% in 2010 to 28.5% in 2011, despite the 5.5% nominal appreciation in the RMB shown in Figure A.¹ Cline and

Williamson (2011) also found that currencies in Taiwan, Singapore, Hong Kong, and Malaysia were undervalued against the dollar by 28.7% to 38.5%, indicating that these currencies were even more undervalued relative to the dollar than the Chinese RMB.

The benefits of full currency realignment

This study estimates the impacts of a 28.5% revaluation of the RMB against the dollar on the U.S. current account (the broadest measure of the trade balance), gross domestic product, U.S. employment, and the federal budget deficit. Taiwan, Singapore, Hong Kong, and Malaysia are also massively and illegally manipulating their currencies. They would also benefit from reduced inflation and an increase in the purchasing power of their workers if they revalued. Similar estimates are developed for the impact of an identical revaluation by these satellite currencies on the assumption that they follow China's lead.

This study first estimates the impact of Chinese revaluation on the U.S. real exchange rate, holding everything else constant. These estimates are developed using 2011 currency weights as estimated by the staff of the Board of Governors of the Federal Reserve (2011). It is important to note that these weights combine three key elements of the competition between U.S. and Chinese goods, including China's share of U.S. total imports and exports and also a measure of competitiveness in third country markets. This last factor is especially important—China's weight in the U.S. third country competitiveness index is higher than that of any other country in the world, including all members of the European Union combined. The overall Chinese currency weight is a weighted average of these three indexes. For 2011, China's weight in the Federal Reserve currency index was 19.871%. It is important to note that this ratio has risen significantly in the past decade: As China's share of U.S. import markets has soared, so has its role as a competitor in third country markets.²

Cline (2008) estimates that a 1% change in the U.S. real exchange rate results in a 0.16 percentage-point change in the current account as a share of GDP (increases in the U.S. real exchange rate result in a decline in the current account balance, and vice versa). In practice, the full effect of currency realignment is reached with a lag of 18 to 24 months. This study estimates equilibrium impacts on trade flows after this adjustment process is complete.

Given these assumptions, a 28.5% revaluation of the RMB would result in a 5.66% depreciation in the U.S. real exchange rate. The RMB revaluation would improve the U.S. current account by 0.91% of GDP, as shown in **Table 1**.³ The International Monetary Fund (2011) estimates that U.S. GDP in 2011 will be \$15.2 trillion, so the current account deficit would improve (fall) by \$138 billion in 2011 (assuming instantaneous equilibrium adjustment in trade flows).

It is widely assumed that Taiwan, Singapore, Hong Kong, and Malaysia have resisted pressures to revalue in order to maintain their competitive posture vis-à-vis China. Were China to revalue, these countries would be free to revalue as well, which would help reduce inflationary pressures and increase the purchasing power of their consumers. Table 1 also estimates the impact of a 28.5% revaluation by these satellite currencies. Their total weight in U.S. currency indexes was 7.557% in 2011. A 28.5% appreciation in these currencies against the dollar would improve the U.S. current account by 0.34% of GDP, as shown in Table 1. This would improve (reduce) the U.S. current account deficit by \$52.5 billion.

If both the Chinese RMB and the satellite currencies revalued together, the U.S. current account balance would improve by 1.25% of GDP, reducing the U.S. current account deficit by \$190.5 billion. Changes in the trade balance contribute directly to U.S. GDP, as shown in the

TABLE 1
Impacts of full rebalancing of the Chinese yuan on U.S. trade and gross domestic product
(based on a 28.5% appreciation of the RMB—equilibrium impacts)

| Scenario | Improvement in U.S. current account deficit (share of 2011 GDP) | Change (\$ billions) | |
|---|---|----------------------|----------------|
| | | U.S. current account | GDP |
| China only | 0.91% | \$138.0 | \$207.0 |
| Satellite currencies | 0.34% | \$52.5 | \$78.7 |
| Total, with satellite currencies | 1.25% | \$190.5 | \$285.7 |

SOURCE: Author's analysis of Cline (2008) and IMF (2011) data.

National Income and Product Accounts (and discussed in the next section).

The impacts of currency realignment on GDP, employment, and the federal budget deficit

Reductions in the current account deficit will increase spending on domestic goods and expand the U.S. economy both directly (through increased exports to China and other countries or reduced imports) and indirectly, through re-spending of the wages earned by workers making these products. We use a macroeconomic multiplier for current account improvements of 1.5 to calculate the economic activity that is induced when income earned by newly hired workers and firms is re-spent throughout the economy. From this re-spending estimate we can then estimate the number of jobs associated with the new economic activity. Essentially, as manufacturing and supporting services workers are hired to produce more goods for export, or to substitute for imports from China and other countries, they will have more money to spend. For example, if they buy lunch at a neighborhood diner, then this will support jobs for wait-staff. If the newly hired waiters and waitresses then buy clothes for their kids, this will support jobs in retail establishments.

A macroeconomic multiplier of 1.5 is consistent with a range of independent estimates of the net macroeconomic effects of increased goods production—including those supplied by the Congressional Budget Office and Moody's Economy.com. This multiplier includes an implied "re-spending" multiplier of 0.5, which is consistent with estimates of private-sector re-spending surveyed by Bivens (2006). This multiplier is applied to the change in the current account to calculate the total amount of new economic activity generated by the upfront spending. (The macroeconomic multiplier assumes that there is slack in the U.S. economy, currently exemplified by the 9.1% unemployment rate in May 2011. If excess U.S. unemployment shrinks or is eliminated in the future, then the multiplier will shrink or be eliminated.)

We use the macroeconomic multiplier to translate the estimated improvements in the current account into changes in GDP. Thus, if only China revalues, then the \$138 billion dollar improvement in the current account

will result in a \$207 billion improvement in GDP, as shown in the last column of Table 1.⁴ If the satellite countries revalue by 28.5%, the resulting \$52.5 billion improvement in the current account will generate a \$78.7 billion increase in GDP. If both China and the satellite economies revalue, then total U.S. GDP will increase by \$285.7 billion, a 1.9% increase in U.S. GDP over 2011.

We then use the historical relationship that prevails between GDP growth and employment growth to infer that each 1 percentage-point increase in GDP corresponds to 1.2 million new jobs. This relationship between GDP growth and employment growth is also relatively constant across many macroeconomic forecasters (see CBO 2011 for the latest example).

If China alone revalues, the resulting \$207 billion increase in GDP will support 1,631,000 jobs, as shown in Table 2. If satellite currencies also revalue, then an additional 620,000 jobs will be created. If both China and satellite currencies revalue for an overall \$285.7 billion increase in GDP (shown in Table 1), then a total of 2,250,000 U.S. jobs would be created, enough to increase total U.S. employment by 1.6% over the May 2011 level (BLS 2011). While the increased growth and labor demand would likely draw some workers back into the labor force, it is likely that unemployment would be reduced by at least one full percentage point if China and the satellite currencies revalued by a full 28.5%.

The impacts of currency revaluation on the U.S. federal budget deficit are also estimated in Table 2. Based on CBO estimates of the relationship between GDP and the federal budget deficit, a 1.0 percentage-point increase in GDP would lead to a 0.375 percentage-point reduction in the federal deficit. This offset comes mostly from revenues, but also from reduced (federal) safety-net spending. It does not include any increase in state or local tax revenue.

If China alone revalued, then the resulting growth in U.S. GDP shown in Table 1 would reduce the federal budget deficit by an amount equal to 0.34% of GDP, or \$51.7 billion per year. If satellite currencies revalued, the federal deficit would decline by an additional 0.13% of GDP per year, or \$19.7 billion. If all of these countries revalued, then the federal budget deficit would be reduced

TABLE 2

**Impacts of full rebalancing of the Chinese yuan
on U.S. job creation and federal budget deficit
(based on a 28.5% appreciation of the RMB—equilibrium impacts)**

| Scenario | Jobs supported | Reduction in federal budget deficit | |
|---|------------------|-------------------------------------|-----------------------|
| | | share of GDP* | (billions of dollars) |
| China only | 1,631,000 | 0.34% | \$51.7 |
| Satellite currencies | 620,000 | 0.13% | \$19.7 |
| Total, with satellite currencies | 2,250,000 | 0.47% | \$71.4 |

* Based on Congressional Budget Office estimates of the relationship between the GDP and the federal budget deficit, a 1.0 percentage-point increase in GDP would lead to a 0.375 percentage-point reduction in the federal deficit. This offset comes mostly from revenues, but also from reduced federal safety-net spending. It does not include any increase in state or local tax revenue.

SOURCE: Author's analysis of Cline (2008) and IMF (2011) data.

by 0.47% of GDP or \$71.4 billion per year. State budgets across the country would also be improved by the resulting growth of tax revenues and the decline in unemployment, Medicaid, and other safety net expenditures.

Over 10 years, if sustained, full revaluation by China and other Asian currency manipulators could reduce the cumulative U.S. budget deficit by \$621 to \$857 billion.⁵ These savings could be achieved at no cost to the U.S. government. Revaluation by China is one of the only deficit-cutting tools available that will stimulate economic growth and job creation; other proposals for deficit reduction involving spending cuts or tax increases will reduce domestic growth and employment.

Comparisons with other estimates of the benefits of RMB revaluation

Cline (2010) has estimated the impacts of RMB revaluation on China's current account surplus. He finds that a 10% revaluation of the RMB would reduce China's current account surplus by \$170 to \$250 billion annually, with a corresponding improvement of \$22 billion to \$63 billion annually in the U.S. current account balance (including satellite currency effects at the high end). Most of Cline's estimates are based on changes in China's real, trade-weighted exchange rate. Data needed to calculate the impact of a given change in the bilateral dollar-RMB

exchange rate on China's real, trade-weighted exchange rate are not included in his study. The one exception is Cline's "Example 1," which is based on the impact of currency revaluation on the U.S. real exchange rate. His estimate assumes that China has a weight of only 9.1% in the U.S. real exchange rate.⁶ Unlike that study, we use current data from the Federal Reserve Board to estimate the impact of a shift in the U.S.-RMB exchange rate; the Fed's 2011 China currency weight is 19.871, more than twice as large as the parameter used by Cline (2010).

As noted above, Bergsten (2010) suggests that the renminbi would need to appreciate by 25% on a trade-weighted basis to maintain equilibrium. Applying this figure to Cline's estimate of the impact of a 10% revaluation implies that the U.S. current account would improve by \$55-\$157.5 billion. The current account adjustment for China estimated here (Table 1) of \$138.0 billion falls within the upper end of this range, but does not exceed it.

Finally, it is important to note that the United States had a trade deficit of \$278.3 billion with China in 2010. Rebalancing of China's exchange rate would reduce but not eliminate this deficit. China engages in a number of other trade-distorting practices, including price dumping, massive and targeted industrial subsidies, and extensive use of government procurement to foster development of domestic industries in order to maximize Chinese exports

through programs such as its indigenous innovation policies. Much more than exchange rate rebalancing will be required to rebalance U.S.-China trade flows.

Changing U.S.-China trade patterns

Scott (2010) estimated the number of jobs displaced by the growth of the U.S.-China trade deficit. This research has been criticized by the U.S.-China Business Council on the grounds that:

[Scott's] 'job loss' calculation assumes that every product imported from China would have otherwise been made in the United States, which is clearly wrong... Much of what we are importing from China is replacing products from other countries, not products that we make in the United States today. (Patterson 2011)

This comment reflects a flawed understanding of the ways in which changes in exchange rates and other policy variables affect trade flows. When the real value of the dollar declines, as it did between 2002 and 2006, its most important impact is on exports. The *rate of growth* of total U.S. imports slowed, but imports did not decline in absolute value until the Great Recession in 2009. The trade deficit peaked in 2006 and declined significantly in 2007 and 2008 largely because the rate of growth of exports accelerated after the dollar declined.

If the RMB is fully revalued against the dollar, it will have three effects on trade: (1) The *rate of growth* of imports will slow; (2) U.S. exports to China will grow somewhat faster (from a very small base); and (3) The rate of growth of U.S. exports to the rest of the world will accelerate significantly. This is because China is the most important competitor for the United States in all other third country markets, even more important than Germany and all other members of the European Union combined. The effect of revaluation on exports will dominate, and is likely to generate most of the new job growth estimated above.

There is another important trend to note in the context of this discussion. The U.S.-China trade deficit is following a negative trend, after controlling for changes in real exchange rates and differences in growth rates. Cline (2010) found that the trend rate of growth in the

bilateral deficit is \$6.6 billion to \$19 billion per year. This trend reflects, in part, the fact that productivity is growing faster in China than in the United States. As a result, in order to maintain stable trade balances, China needs to revalue its currency each year, even after it fully revalues. Estimates developed here suggest that China will need to revalue by an additional 1.4% to 3.9% per year in the future until underlying productivity growth differences between the two economies converge.

Conclusion

If China were to revalue the yuan (or Renminbi) to its equilibrium level, and satellite countries followed suit, U.S. GDP would increase as much as \$285.7 billion (1.9%), creating up to 2.25 million U.S. jobs, increasing total U.S. employment by 1.6 percentage points, and reducing the U.S. unemployment rate by at least one full percentage point. This growth would reduce the U.S. budget deficit by up to \$71.4 billion per year. These full benefits could be achieved within 18 to 24 months. Over 10 years, full revaluation of the Chinese RMB and other satellite currencies would reduce the federal budget deficit by \$621 to \$857 billion.

Currency manipulation is also costly for China and other Asian countries that follow China's lead. These countries are suffering from rapidly rising inflation which is undermining real wages and fueling asset price bubbles. The inflation rate in China reached 5.5% in May 2011; food and oil prices, which make up larger shares of budgets in China than in the United States, have been rising at double digit rates. Full revaluation by China and other currency manipulators such as Hong Kong, Taiwan, Singapore, and Malaysia could lower inflationary pressures and boost the purchasing power of their domestic workers, reducing the threat of future asset bubbles and cooling off these overheated economies. It would also rebalance growth in the global economy, helping to restore demand in the United States, Europe, and other countries where growth has slowed dramatically in the past year.

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Endnotes

1. Note that inflation was 2.1 percentage points higher in China than the United States in the past year. Thus, the real value of the RMB has gained approximately 7.7%. The increase in the FEER in 2011 (Cline and Williamson 2011) largely reflects the growth in U.S. current account deficits, and projected increases in China's current account surpluses (the IMF projects that China's current account surplus will increase from 5.7% of GDP in 2011 to 6.3% in 2012 and 7.8% in 2016, assuming fixed exchange rates).
2. Between 2000 and 2011, China's overall currency weight rose from 7.881 to 19.871, an increase of 152%, and its third market competitiveness index rose from 10.03 to 23.001, an increase of 129%.
3. The 28.5% revaluation of the RMB multiplied by China's share of U.S. trade (19.871%) yields 5.66% depreciation in the U.S. real exchange rate. That appreciation causes a $5.66 \times 0.16 = .91$ percent of GDP improvement in the U.S. current account.
4. The \$138 billion improvement in the current account results in a $\$138 \text{ billion} \times 1.5 = \207 billion increase in GDP.
5. These estimates assume that there is slack in the U.S. economy (e.g. excess unemployment). If excess unemployment is reduced or eliminated in the future, then the impacts of currency realignment on the federal budget deficit would be reduced.
6. This estimate reflects the ratio of bilateral exports plus imports to total U.S. trade in 2006. Note that this term leaves out the important impact of the bilateral exchange rate on the competitiveness of U.S. products in third markets, as estimated by the U.S. Federal Reserve. In addition, the Federal Reserve's estimate of China's share in the U.S. real exchange rate index rose from 16.423% in 2006 to 19.871% in 2011, an increase of 21%. The use of current vs. historical exchange-rate weights and the inclusion of third country competitiveness effects more than doubles the impact of a revaluation of the RMB on the real dollar index.

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OUR PLAN

Expand American Production, Hiring, and Capital Expenditures

- Establish a manufacturing investment facility to leverage private capital for domestic manufacturing
- Expand and make permanent clean energy manufacturing tax credits and industrial energy efficiency grants to allow America to lead on green job creation
- Link federal loan guarantees for new energy infrastructure projects, including nuclear, wind, solar, other renewable energy sources, as well as the smart grid, with expanding domestic supply chains
- Adopt immediate, up-front expensing rules for plant and equipment to spur capital expenditures
- Enforce our trade-legal Buy America and other domestic procurement requirements to prevent leakage of tax dollars overseas

Invest in America's Infrastructure

- Create a National Infrastructure Bank to finance high-value, long-term infrastructure projects, such as roads, bridges, high-speed rail, and other needs
- Enact a robust, multi-year surface transportation infrastructure program of at least \$500 billion financed exclusively by fuel taxes

Enhance Our Workforce

- Refocus on technical and vocational education, providing a seamless program that bridges high school and post-secondary education to produce the next generation of highly skilled manufacturing workers
- Reward companies that are investing in effective skills and training programs for their workers

Make Trade Work for America

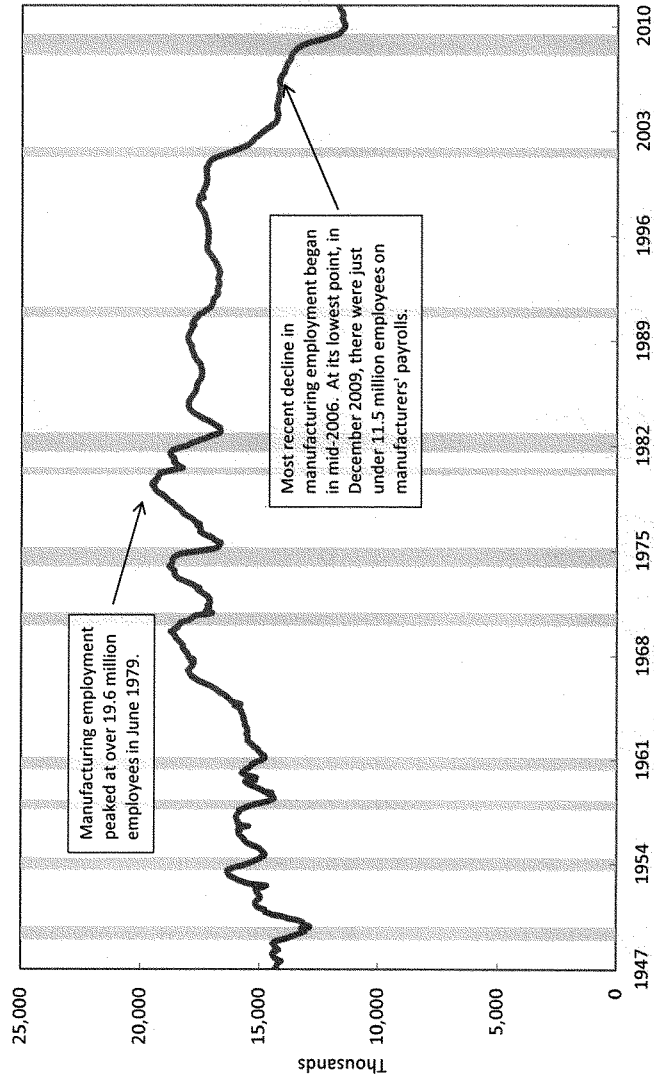
- Keep America's trade laws strong and strictly enforced to provide a level playing field for our workers and businesses
- Penalize and deter mercantilist nations such as China that manipulate their exchange rates and implement non-tariff barriers to gain an unfair trade advantage
- As the Administration works to double exports, expand the goal to include balancing our trade account so that gains in exports are not overwhelmed by increased imports

Rebuild America's Innovation Base

- Make permanent the research and development tax credit and enhance it to incentivize commercialization and production in America
- Focus federal investments in new technology and workforce training on promoting regional clusters of innovation, learning and production

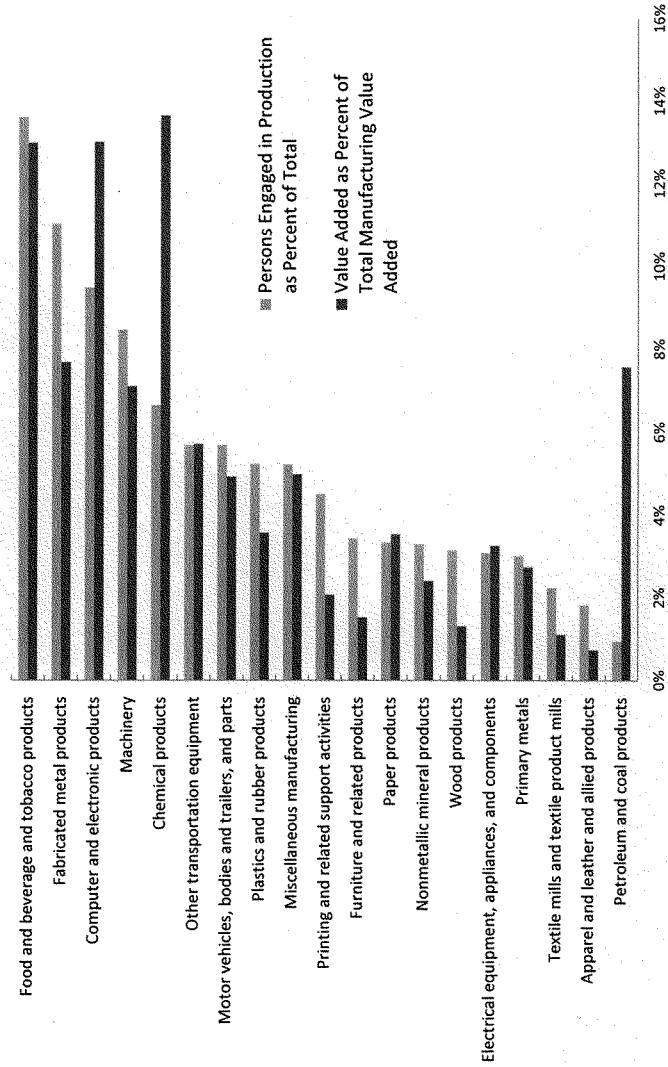
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Employment in Manufacturing Has Fallen From 1970s High; Most Recent Decline Began in Mid-2006



Note: Grey areas represent periods of recession as defined by NBER.
Sources: Prepared by the JEC Chairman's staff based on data from the Bureau of Labor Statistics and National Bureau of Economic Research.

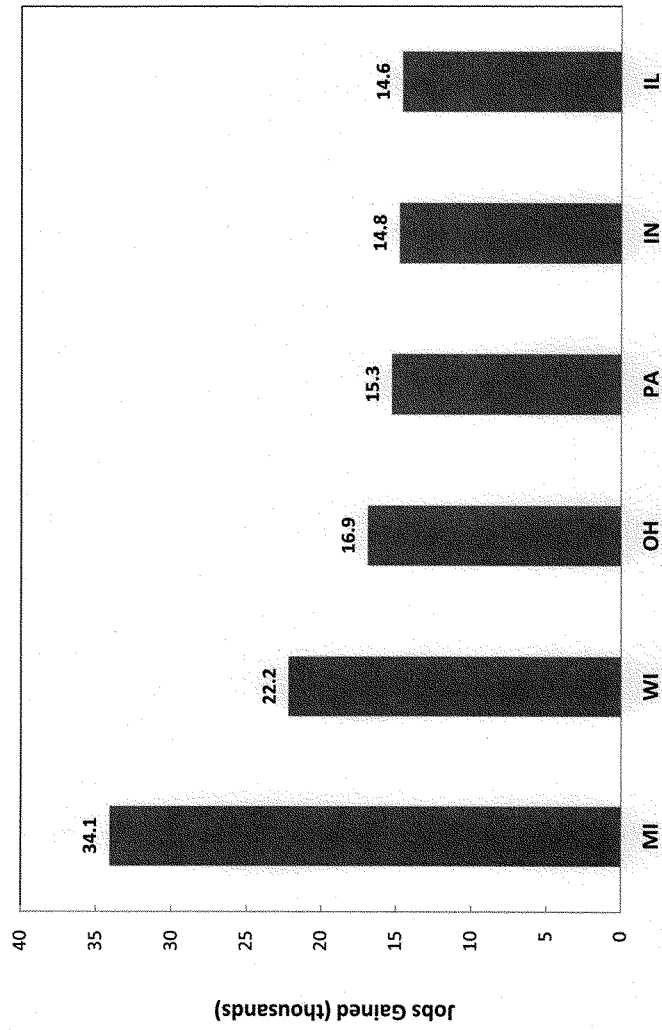
Share of Different Industries to Total Manufacturing Value Added and Total Manufacturing Employment, 2009



Source: Prepared by the Chairman's staff of the Joint Economic Committee based on data from the Bureau of Economic Analysis.

States with the Largest Gains in Manufacturing Jobs

December 2009 - April 2011



Source: Chairman's Staff of the Joint Economic Committee based on data from the Bureau of Labor Statistics.

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STATEMENT OF CONGRESSMAN DANIEL LIPINSKI

JOINT ECONOMIC COMMITTEE

**Manufacturing in the USA:
Why We Need a National Manufacturing Strategy?**

June 22, 2011

I would like to thank Chairman Casey, Congressman Brady, and the other distinguished members of the Joint Economic Committee for holding this important hearing on "Why We Need a National Manufacturing Strategy". This is a very important topic, and one that I have worked long on, and I appreciate the opportunity to provide this statement for today's hearing.

Manufacturing has been a pillar of the American economy for generations, and remains a valuable path to the middle class for millions of families. Accounting for nearly two-thirds of U.S. exports, it is essential to leading the country out of recession and critical for our national security by ensuring we can provide for our own defense.

Unfortunately, manufacturing has suffered dramatic declines in recent years. Indeed, another decade like the last one – which saw the loss of one-third of all manufacturing jobs – would undermine the American middle class and leave us unable to produce many of the goods we require for our national security. Surprisingly, despite the high value that manufacturing provides to the United States, we have no national policy or coordinated approach to supporting our vital industrial sector.

As the Information Technology and Innovation Foundation recently stated in its report, "The Case for A National Manufacturing Strategy":

"Unfortunately, while many other nations – and indeed many U.S. states – are taking steps to boost the competitiveness of their manufacturing industries, the United States lacks a clear, coherent strategy to bolster the competitiveness of manufacturing firms of all sizes and across all sectors, a shortcoming that must be rectified if the United States hopes to 'win the future' in manufacturing."

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While at its core, manufacturing is driven by the entrepreneurial spirit of American citizens, it is a coordinated system that is affected by many government programs and policies. Agencies and departments across the federal government, and throughout state and local governments, interact with our manufacturing economy in many diverse ways. I believe it is essential that we take a strategic view of how the government supports manufacturers in the U.S., identify where we as a nation want this sector to be in the future, and organize a plan for how we can support private industry and American workers to achieve that goal. We have the opportunity to continue to 'make it in America,' but we need a coordinated approach and foresight to make that a reality.

To make sure that we do, I introduced the National Manufacturing Strategy Act last year. With the support of numerous organizations, including the Alliance for American Manufacturing, National Defense Industrial Association, US Business Industry Council, National Council for Advanced Manufacturing, AFL-CIO, American Iron and Steel Institute, Association of Manufacturing Technology, National Tooling and Machining Association, Precision Metalforming Association, American Manufacturing Trade Action Coalition, and Aerospace Industry Association, this bill passed the House of Representatives in July with strong bipartisan support, 379 to 38. Since I reintroduced it in the 112th Congress as H.R. 1366, it has again attracted a bipartisan list of cosponsors.

The National Manufacturing Strategy Act is a powerful tool for producing concrete action to help American manufacturers create jobs. It requires the President to establish a Manufacturing Strategy Board within the Commerce Department that includes federal officials, two state Governors from different parties, and private-sector leaders and stakeholders from the manufacturing industry. The Board will conduct a comprehensive analysis of the manufacturing sector covering everything from trade issues to financing to the defense industrial base. Based on this analysis, the President's Board will then develop a National Manufacturing Strategy that includes short- and long-term goals for the manufacturing industry and specific recommendations on how to achieve those goals. The recommendations may include actions that can be taken by the President, Congress, state and local governments, the private sector, universities, and industry associations. They may also include ways to improve government policies and coordination among federal agencies that impact manufacturing. The first Strategy will be due one year after the bill becomes law and subsequent Strategies will be due every four years, in the second year of each Presidential term.

Such an ends-ways-means strategy will enable the federal government to identify the many ways in which it affects, interacts with, and depends on manufacturing. From innovation and research to taxation and trade policy, an across the government strategy will help align government priorities in support of manufacturing competitiveness, and foster efficiency by coordinating policies and programs that are currently stovepiped in various government agencies.

In addition, to make the strategy a learning, iterative process, and to assure we stay the course and that the strategy produces action, the President's Board will annually provide an updated review of the state of manufacturing, assess the implementation of the Strategy's recommendations, and recommend ways to further the Strategy's implementation. In addition, the Government Accountability Office will analyze the implementation of the Strategy, its recommendations, and the process for developing the Strategy. Public hearings will be held prior to the Strategy's development and a draft of the report will be made available for 30 days for public comments that may be incorporated into the final version.

Other countries take a far more aggressive and coordinated approach to bolstering their manufacturing sectors, while America has allowed its manufacturing base to wither. We need to change that right now and adopt a strategy for revitalizing American manufacturing that creates jobs and helps make us the leading producer of high-value goods for decades to come. I am not alone in calling for this. The National Association of Manufacturers has issued its own national manufacturing strategy. In an interview earlier this year, Andrew Liveris, CEO of Dow Chemical, stated:

"[China and Germany] have a holistic approach to manufacturing. It's a strategy. Basically, they say manufacturing is a very vital part of my economy. It employs my people; it pays them great wages. So they have a country strategy. They approach it as a country. Now, those of us who are free marketeers would say, well, gee, you know, that's government interference. Well, I don't see that as government interference. I see that as the public sector establishing the rules of the road such that the private sector knows what those rules are and therefore, we can compete."

Leaving manufacturing to other countries and becoming an entirely service-based economy is clearly not the way to keep America strong. Losing manufacturing means losing your competitive edge, especially in high-tech industries.

Some claim there is nothing that can be done to halt the exodus of American manufacturing jobs. They are wrong. American innovation and entrepreneurialism remain unmatched. I have no doubt that America has what it takes to remain a world leader in everything from aerospace to automobiles. And in fact, there have been signs of a turnaround in American manufacturing, with the industry recently posting its first yearly jobs gain since 1997. The National Manufacturing Strategy Act will ensure that we build on this momentum and that our manufacturers are equipped to compete and win in the global economy.

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